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Scope and Editorial Policies

Nigerian Journal of Applied Psychology is primarily meant to publish reports which can make professional as well as non-professionals utilize psychological principles in making the human organism more mentally and physically healthy. The journal is meant to make it possible for many more people to utilize psychological principles in their day-to-day activities. One of the aims of the journal is therefore to report articles which when read by people may increase their self-understanding, awareness, problem-solving capacities, creativity and improved adaptive and coping behaviour strategies.

The Journal is an Applied Psychology Journal par excellence. The Journal publishes reports, which may have applications to individuals in the family, educational contexts, health delivery systems, and criminal justice systems. Articles, which can analyze and help to solve many problems of society, are also welcome.

The editorial policy of the journal will use the following order of publication preference.

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- Programmes that can be self-administered to solve psychological and other behavioural problems.
- Review articles that expose the various strategies of managing certain maladaptive behaviours.
- Theoretical or speculative reports for heuristic consideration in problem solving.
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Town and urban planning

Industry

Organisational settings

Agriculture

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Parenting

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Correctional services etc.

General Information and Manuscript Preparation

Two copies of manuscript of typed doubled space on one side of A4 paper submitted alone with electronic copy.

Each manuscript should contain Name and address of the author including his institutional affiliation, abstract, introduction and the body of the paper.

Each page should be numbered consecutively in the upper right hand corner beginning with the Title page.

Papers should not exceed 15 pages including references.

Manuscripts

The title page contains a concise but information statement, which should not be more than 15 words.

Below the Title should be written the author's names in order, first name, middle name and family name last with the highest degrees and his/her institutional affiliation.

Abstract – The abstract of the manuscript should not be more than 150 words. It should be on page 2 of the manuscript. Abstract should state concisely the purpose(s) of the paper, basic segments and general principles to be put across to readers.

If the paper is the report of the study, it should include background, methodology, analyses and results.

Background includes introduction, and review of literature central to the study.

Methodology should include concise explanation of design, sample and sampling procedure, instruments and their psychometric characteristics plus a well-explained procedure.

Results should be presented in form of tables to which reference is made in brief descriptions.

References should be written in alphabetical order. The reference list should include only the cited works within the body of the paper. Reference should follow the APA system.

Manuscript Submission

All manuscripts should be submitted to the Editor-in-Chief:

Professor D.A. Adeyemo

Department of Counselling and Human Development Studies
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Thank you for your patronage of this great journal.

Professor A. Oyesoji Aremu

Head of Department
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Psycho-sociological Determinants of Social Identity among freshmen of the University of Ibadan, Nigeria

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Abstract

This study investigates determinants of self-concept, social self-efficacy, locus of control, and parents' socio-economic status and gender on the social identity of freshmen at the University of Ibadan, Nigeria. Using a descriptive research design of correlational type, a sample of 250 freshmen was randomly sampled from the population of newly admitted students from five purposive faculties through a multistage sampling technique. Five validated instruments; Assertiveness (0.70), Self-Concept Scale (0.71), Social Efficacy Scale (0.76), Locus of Control Scale (0.71), and Parents Socio-Economic Scale (0.64) representing dependent measures were regressed against Socio-identity measure (0.75) of the respondents. Findings using Pearson Product Moment Correlation Coefficient and Multiple Regression showed that there was relationship among the independent measures on the social identity of the freshmen ($r = .469$; $p < .05$); social assertiveness ($r = .643$; $p < .05$); Locus of Control, ($r = .547$; $p < .05$); gender-type, ($r = .217$; $p < .05$); and Self-Concept ($r = .216$; $p < .01$). Parents socio-economic status was however, found not to correlate with socio identity of the respondents ($r = .014$; $p > .05$). And of all the measures, self-concept was found to be the best predictor of socio-identity ($t = 5.573$; $P < 0.05$). Similarly, the joint influence of all the measures (social assertiveness, self-concept, social self-efficacy, locus of control, socio-economic status; and gender had a significant joint influence on the social identity of the freshmen ($F(5, 244) = 41.589$; $p < 0.05$). The implications of these on social identity of newly admitted students are discussed in the study.

Keywords: Freshmen social identity, Social assertiveness, Self-concept, Self-efficacy, Locus of control

Introduction

As the need to belong intensifies from childhood to early adolescence, a visible shift in an individual's interpersonal relationships can often be identified during specific transition periods, such as the transition to adolescence, then adulthood. During this period, an individual typically reports a decline in identification with family members but an increase in identification with peers. According to Merriam-Webster (1828), a fresh-man is a student in the first year of high school or college. A person who has decided to attend higher education in a university generally is an adolescent which is the development stage between children and adult. Ali (2007) explained that the tasks in adolescent years consisted of adjusting the self in the developmental process whether physically or psychologically, becoming independent and getting adjusted with the social norms and values, and affirming the personality identity. Affirming personal identity

determines who he or she is and what he or she wants to be. To affirm the self-identity, one must seek for working alternatives, choose one of the best possible clique or work based on the personal interest, and has the commitment to have achievement in accordance to the identity (Marcia, 1966). The development of a strong and stable sense of self is widely considered to be one of the central tasks of a man, hence, the need for a company or group of people which an individual can fit into and then affirm the sense of worth. The increased interest of society and science in the problems of identity today is associated with the challenges of the modern world-social, economic, political, environmental, and others that affect the structure, content, dynamics, and balance of its types. Martsinkovskaya (2016) characterises the current stage of development of culture and society as transitive, which is characterized by variability, uncertainty, and fluidity of renewal, and therefore it is necessary to determine their impact on the identity of younger generations, for whom constant changes have become the natural background of life. In contrast to personal identity, which grows out of a person's awareness of individual qualities and personality traits, as well as the definition of life goals, values and beliefs, the content of social identity is filled with social roles, statuses, categories and identifications with a particular group.

Success in forming the self-identity will help adolescents to obtain the proper roles in their life (Afrilyanti, Herlina, & Rahmalia, 2015). Development of self-identity in the adolescents will influence the directions of their behaviours, their attitudes toward the environment, their personal conducts in their jobs, and reasons of their choices (Martono, 2006). Based on the above considerations, college students are expected to make good decisions. This research is aimed at finding the role of identity statuses of freshmen students on their decisions to choose the direction of their studies. A person who has decided to attend high education in a university generally is an adolescent, the developmental stage between children and adult. Ali (2007) explained that the tasks in adolescent years consisted of adjusting the self in the developmental process whether physically or psychologically, becoming independent and getting adjusted with the social norms and values, and affirming the personal identity. A person who has decided to attend high education in a university generally is an adolescent, the developmental stage between children and adult. Ali (2007) explained that the tasks in adolescent years consisted of adjusting the self in the developmental process whether physically or psychologically, becoming independent and getting adjusted with the social norms and values, and affirming the personal identity. Success in forming the self-identity will help adolescents to obtain the proper roles in their life (Afrilyanti, Herlina, & Rahmalia, 2015). Development of self-identity in the adolescents will influence the directions of their behaviours, their attitudes toward the environment, their personal conducts in their jobs, and reasons of their choices (Martono, 2006). Based on the above considerations, college students are expected to make good decisions. This research is aimed at finding the role of identity statuses of freshmen students on their decisions to choose the direction of their studies

The term identity comes from the Latin noun *identitas*, where *tatis* is a derivation of the adjective *idem* which means "the same". There is a focus on sharing a degree of sameness with others on a particular dimension and in order for such sameness to be established comparison is necessary. To complicate matters further the term identity is not used to mean the same thing within psychology or across the social and behavioural sciences. Even when it comes to use of the term social identity, there are divergent meanings each embedded in particular theoretical frameworks and literatures (Brewer, 2001; Deaux, 1993). Erikson one of the earliest psychologists interested in identity, highlighted two types of identity – ego identity and cultural or social identity. Ego identity refers to a conscious sense of self as unique as well as continuity of experience. A strong sense of self is argued to emerge during adolescence and is central to well-being. One way to think about social

identity within this framework is to capture the extent to which there is a supportive community that validates the identity and gives it strength. For example, Cote and Levine (2002, p. 94) aptly aver that “greater validation of social identity can nurture ego identity”. More precisely, Erikson (1968, p.165) argues that ego identity's most obvious concomitants are a feeling of being at home in one's body, a sense of “knowing where one is going”, and an inner assuredness of anticipated recognition from those who count”. There is also work on culture and social representations in shaping the sense of self and identity. Being a member of a community means that people come to share the same knowledge, beliefs, theories, conventions and norms which give meaning to the environment and guide practices and actions.

A common reality of stereotypes, attitudes, opinions and categorizations is constructed and shared through collective activities (Augoustinos & Walker, 1995; Chryssochoou, 2004). Such processes underpin the formation of people's ‘distal’ knowledge, expectations and theories about the social world and themselves as a function of being a member of a particular “community” of interacting individuals. There is a trajectory of work through Cooley (1902/1922) and Mead (1934), in particular, where others' perceptions and reactions are argued to shape one's self-view in a dynamic way. These ideas form the basis of the way identity is understood in sociology where the formation of social identity includes the reflected appraisals of others and others expectation. The condition for the development of social identity is the individual's assimilation of social experience and acceptance of social roles in relation to the fact that the reaction to a particular role characterizes personal identity. Goffman's (2018) idea of a sign as a sign of a person's expression of their qualities and differences in interaction with others, as well as their separation of actual (based on easily provable, obvious, objective attributes) and virtual (based on imaginary attributes that are possible under certain conditions) social identity. This view is completed by Habermas(1987), noting that social identity provides the ability to fulfill various requirements of all role systems to which a person belongs as cited in Antonova,(1996)

Social identity relates to how individuals make conscious identification of who they are in relation to other s and most times, in specific contexts. This therefore, provides people with some sense of self-worth and self-esteem. Identity as a construct, is an inevitability and integrity that unites its personal and social features. Social identity is therefore, as a type of identity is the result of defining oneself through membership in a social group in the form of self-categorisation and evaluation. It is an entity that has some psychological underpinnings given that its attributions are from individuals, significant others and environmental contexts.

Social identity theory originated from the conviction that group membership can help people to instill meaning in social situations. Group membership, could therefore, help people to define who they are and how they could relate with others. The theory was developed as an integrative theory and it is aimed at connecting cognitive processes and behavioural motivation. That is, the instructiveness of cognitive processes and behavioural motivations produce social identity. There are some multidimensional perceptions encompassing several domains such as mood states (anxiety, depression, distress, and positive affect), cognitive-behavioural responses (satisfaction, self-efficacy, self-esteem, and locus of control), and social factors (socioeconomic status, education, employment, religion, ethnicity, family, physical attributes, locality, relationships

In terms of distinguishing the concept of student social identity from other related but clearly distinct constructs, there are in particular two constructs that have been the focus of considerable research and which also need our attention. Firstly, there is the concept of academic self-concept.

Academic self-concept refers to students' perceptions of their academic competence (including interests and enjoyment in what they learn) or more generally students' perceptions about themselves in achievement situations (Bong & Skaalvik, 2003; Ireson & Hallam, 2009). The influence of academic self-concept on 'students' academic functioning' has been extensively researched (Bong & Skaalvik, 2003). It has been found that a positive academic self-construct is associated with higher academic engagement, goal setting, and achievement.

The main distinguishing feature of academic self-concept from student identity is that, although academic self-concept is built on social comparisons, it is fundamentally an individual construct, as opposed to student identity. By the social nature of student identity, we mean that student identity is not an individual perception about performing in an academic environment. Rather, it represents a shared self-perception shaped by the way in which students see themselves as members of a social category, especially for new student who the environment is new to and still finding his feet to be rooted in: in this case, the social category being university student (of a certain faculty/discipline). Secondly, a significant concept that can be seen as overlapping with students' social identity is the 'sense of belonging' to the university/learning community. Educational research conceptualizes a sense of belonging as a self-reported fitting in or feeling 'at home' in a community (Hurtado & Carter 1997; Meeuwisse, Severiens, & Born, 2010; Zepke, Leach, & Prebble, 2006). However, social psychology research from a social identity perspective considers the sense of belonging as part of the broader construct of social identity. Specifically, the sense of belonging is captured by people's self-definition in terms of the groups they belong to (Hogg & Abrams, 1988; Hogg & Terry, 2000). In the current research, we decided to explore the more inclusive concept of student social identity rather than the sense of belongingness as it also captures the more subjective dimensions of self-definition as a university student which are likely to play a more central role in relation to learning in the context of higher education.

Self-concept often meant self-esteem (one's evaluation of oneself in affective (negative or positive terms) (Rosenberg, 1979). To broaden this view, Rosenberg (1979) suggests that there was more to the self-concept than self-esteem. He defined the self-concept as the sum total of our thoughts, feelings, and imaginations as to who we are. Later conceptions elaborated and refined this view suggesting that the self-concept was made up of cognitive components (given the collection of identities) as well as affective components or self-feelings including self-esteem (both worth-based and efficacy-based self-esteem) (Franks & Marolla, 1976; Stryker, 1980). In general, the self-concept is the set of meanings we hold for ourselves when we look at ourselves. It is based on our observations of ourselves, our inferences about who we are, based on how others act toward us, our wishes and desires, and our evaluations of ourselves. This self-image guide moment-to-moment interaction is changed in situated negotiation and may act back on the more fundamental self-view. Studies exploring the concept of social identity in higher education found that subjective dimensions of belongingness to a university community (social identification in terms of a university student) were clearly associated with dimensions reflecting psychological well-being such as self-esteem, life satisfaction, and depression (Cameron, 1999).

Rotter (1966, 1971) was the first social scientist to use the concept of locus of control, a term that has its origins in social learning theory and social cognitive psychology. According to Rotter, behaviour can be predicted from individuals' values, expectations, and the situation in which they find themselves; locus of control is a type of expectation regarding how much control individuals feel they have over what occurs in a situation. This is another important concept that has a

significant impact on how individuals' expectations shape the goals they set for themselves. It is defined as a generalized expectancy for internal as opposed to external control of reinforcements - a belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our personal control (external control orientation) (Zimbardo, 1985). Those people with a strong internal locus of control, or internals, tend to attribute outcomes of events to their own control, whereas externals attribute outcomes of events to external circumstances. The latter is linked to depression, negative feelings, and stress (Aremu, Francis Pakes & Les Johnstonet , 2008). Of course, there have many types of research related to Locus of control and student' academic performance, but there is hardly any research work on locus of control and Fresh student and their social identity.

Self-efficacy, the second theory of existential-phenomenological counselling in this study, is associated with Albert Bandura. It has its roots in social cognitive theory. Bandura (1986, p. 391) defines perceived self-efficacy 'as people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performance'. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs according to Bandura (1997) produce diverse effects through four major processes — cognitive, motivational, and affective and selection processes. Within this perspective, individuals' behaviour constants under reciprocal influence from cognitive (and other personal factors such as motivation) and environmental influences. Bandura (2001) calls this a three-way interaction of behaviour, cognitive factors, and environmental situations. Krueger and Dickson (1994) reason that people with high perceived self-efficacy focus on the opportunities worth pursuing, whereas the less self-efficacious dwell on the risks to be avoided. The influence of self-efficacy has also been investigated in academic performance, career, and vocation. Studies in these areas include that of Bouffard-Bouchard, Parent, and Larivee (1991), Aremu and Ogbuagu (2005) on academic performance; Owre (2005) and Hackett and Betz (1981) on career development of women; Aremu and Akpochafo (2007), Laat and Walters (2006) on teaching self-efficacy.

Being assertive means being honest about your feelings, opinions, or rights. It does not mean being aggressive in which someone else may feel threatened or disrespected. Being aggressive may result in feeling like a bully and losing important relationships. Being assertive also does not mean being passive in which you are too intimidated to say what you truly feel or believe. Remaining passive in situations that mean a lot to you, can result in feelings of being manipulated, used, or disrespected. Being assertive is just as important when your feelings are positive as when they are negative. For example, politely but firmly saying no to requests for your time or possessions when you cannot offer them without resentment or annoyance is really a favor to the friend who is asking. It avoids a hidden agenda between you which may later damage the relationship and saves you from carrying those negative feelings of resentment. When people trust you to say "no" when you should, they will also trust that your "yes" is genuine and carries no hidden obligation. In addition, when someone offers your assistance or even a compliment, sincerely say "yes" or "thank you" lets you experience some of the positive regards that others have for you and builds your own base of healthy self-respect and balanced self-care.

The socio-economic status of parents is a major contributing factor, which affects the academic achievement of students. In every society, there exists a sort of social grading of what (Blake, 1980) termed as social stratification, which means the division of people into different social classes. In reference to this system of social classes in Nigeria. (Acoseh, 1983). Has emphasised

that some groups belong to the upper, middle, and lower classes. These groups are divided according to their respective educational achievement, wealth, income, language, and style of life and so on and so forth. The upper-class peoples are those who occupy the most prestigious positions, while the middle-class peoples are those who achieved their own social status while the lower or working-class peoples are those whose income and occupational status are very low in the society (Fafunwa, 1963). However, it has been discovered that differences in parent' economic status determine the socialization process of the student and his academic achievement in school (Okorie, 1984). Students in the up class homes or families are assumed to have received proper and better parental care compared to children from the middle lower-class families, and that this has given them a lot of advantages in school over the latter (Fafunwa, 1974). Moreover, it has been observed that the parents socio-economic status tends to be strongly associated with the style of interaction between members of the family; that the middle class and upper-class families give more freedom to their children in participating in decision-making as part of independence training. In the past intelligence was thought to be the sole determinant of academic achievement of students.

Gleaning on the above literature and submissions, the researchers raised the following questions and hypotheses to guide the study:

Research Questions

1. What is the significant relationship among the following variables: social efficacy, social assertiveness, locus of control, gender; and socio-economic status on the social identity of freshmen in the University of Ibadan?
2. What is the combined influence of the criterion on the measure of social identity of freshmen in the University of Ibadan?
3. What is the relative influence of the independent variables (social efficacy, social assertiveness, locus of control, gender, socio-economic status, and self-concept) to the prediction of social identity of freshmen in the University of Ibadan?

Hypotheses

1. There is no significant difference in the social identity of male and female respondents.
2. There is no significant difference in age range and social identity of respondents.

Method

This paper discusses the procedures through which the study was conducted using the design, population and sample, instrumentation, data collection; analysis employed. These are guided within the ambient of research ethics.

Design

The study adopted a descriptive research design of correlational type. Such an approach does not involve the manipulation of variables in the study. It neither adds to nor subtracts from the existing fact. However, it carefully observant recorded information as it naturally occurred at the time the study will be conducted.

Population and Sample

The participants for the study comprised students of the University of Ibadan, Nigeria that were newly admitted during the 2018/2019 academic session. They are herein in the study refers to as freshmen. The sample of 250 of the respondents was from five faculties (Education, Arts, Science, Social Science, Agricultural Science and Pharmacy). University of Ibadan, Nigeria was founded in 1948 as a College of the University of London; it is therefore, the premier University in Nigeria.

The sample cut across male and female respondents. A multi-stage sampling procedure was adopted. First, faculties in the university were stratified and randomly selected for the study, using a simple random sampling technique. The researchers selected fifty freshmen from each of five selected faculties in the university.

Measures

The study utilised six validated instruments of paper-pencil-response format. Gender was also measured. These are explained as follows:

Social Identity Scale

The AMQ (Maras, 2002; Maras et al., 2006; Maras et al., 2007; Maras et al., 2012) is a research tool designed to assess children's social identity with several institutions including academia. The AMQ is comprised of 29 items, each scored on a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5) with the exception of Item 5 which is reversed scored. The 29 items have previously been grouped into seven composite variables relating to an adolescent's level of perceived social identity and self-concept (Table 1): peer identity (four items), family identity (four items), school identity (four items), academic competence (four items), academic effort (four items), academic importance (four items), and self-worth (five items). *"I like being with my friends"*. *"I like doing the same as my friends"*. *"I like hanging out with my friends"* *"I am similar to my friend"*

Locus of Control Scale

Locus of control can control events and outcomes in their own lives (Rotter, 1966). Individuals with a high internal locus of control believe that events in their life are a result of their actions, while those with a low external locus of control believe that the events in their life are primarily a result of outside forces (e.g. other people, fate, chance) acting upon them. Prior analyses have displayed a positive association between locus of control and educational achievement (e.g. Ekstrom, 1986; Ross & Broh, 2000). For more on locus of control see Rotter's article 'Generalized expectancies for internal versus external control of reinforcement' (1966). To measure locus of control, the Senior Survey included six questions that constitute a locus of control scale. The response options are as follows; strongly agree (1), agree (2), disagree (3) and strongly disagree(4) Undecided(5) Example of some of the items on the scale: *"I don't have enough control over the direction of my life, my plan hardly ever worked out, so planning only makes me unhappy, Whatever happens to me is my doing"*

Self-Concept Scale

The SCQ is a self-report scale measuring self-esteem (Robson, 1989). It consists of 30 items (e.g., *"I have control over my life," "I feel emotionally mature," "I can like myself even if others don't"*). The items are based on seven components of self-esteem, according to theoretical and empirical

information reviewed by Robson (1988). The scoring is performed on an eight-point scale, ranging from completely disagree to completely agree. The SCQ has been proven to have good reliability (Cronbach α of .89) and good validity (clinical validity of .70; i.e., the correlation between the scores on the SCQ and estimates of self-esteem made by experienced clinicians on a 10-point visual analog scale for a sample of psychiatric patients; Robson, 1989). The SCQ was translated into Swedish and then back-translated into English in order to ensure accuracy. After the retranslation into English, the questionnaire was almost totally identical to the original version, after some minor revisions, and seemed to measure the same constructs

Social-Efficacy Scale

Social-efficacy was measured in the study using the self-efficacy scale developed by Jerusalem and Schwarzer (2013). The scale contained 10 items rated on a 4-point Likert format ranging from 1: Strongly Disagree to 4: Strongly Agree. Some of the examples of the items in the scale included, *It is easy for me to stick to my aims and accomplish my goals, I am confident that could deal with efficiently with unexpected results, I can solve most problems if I invest the necessary effort*. The General Self-Efficacy Scale is correlated to emotion, optimism, and work-satisfying action. Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety. The scale has an internal consistency of 0.76. This is an indication of the fairly high construct validity of the present instrument.

Parents' Socio-Economic Status Scale

The parents' socio-economic status of adolescents was measured by Socioeconomic status (SES) developed by Salami (2000a). It was developed to measure the educational, emotional, and all status of adolescents. The items in three quested footage of from participants also. These items included parents' occupational (10 marks), parents' level of education (12 marks), parents' residence (5 marks), parents' possession of necessary and luxury items (29 marks) giving a total of fifty marks maximum score of 56. All these were summarized to indicate the participants' family socioeconomic background as being high, or low. The highest score obtainable is 56 while the least is 6. The test-retest reliability of the scale when administered among 100 secondary school students in Ibadan, Oyo State Nigeria. It was 0.73 with an interval of three weeks. The instrument was validated by correlating the socio-economic status scale by Ipaye (1977). The correlation obtained between their scores on the two instruments was 0.64. This is an indication thee a fairly high construct validity of the present instrument.

Assertiveness Scale

The Rathus Assertiveness scale (RAS) was designed to measure respondents' levels of assertiveness. It is an instrument for measuring behavioural change in assertion training. The RAS was developed in 1973 by Spencer Rathus. The validity of the RAS scores to two external measures of assertiveness. Test-retest reliability was established using Pearson Product Moment Correlation over a months period($r=.78$), indicating moderate to high stability of test scores. Split-half reliability (a measure of internal consistency reliability) was calculated to be .77, suggesting that the qualities measured by the RAS possess moderate to high homogeneity. Gustafson (1992) found that the original scale was reliable (Cronbach $\alpha=.82$). The scale contains 30 items, with items scored from very characteristic of me to very uncharacteristic. For example, *most people*

seem to be more aggressive and more assertive than me, I am careful to avoid hurting other people's feeling, when I am asked to do something, I insist upon knowing why"

Procedure

The instruments sectionalised into six were administered to the respondents in their faculties, University of Ibadan, Nigeria. The researchers employed the services of two research assistants to assist in the distribution and collection of the questionnaires. The respondents were adequately briefed on the need to respond to the items in the six sub sections in the questionnaires. The freshmen were also assured of the confidentiality of their responses. The data collection process lasted for two weeks during which 250 copies of the questionnaires were administered, retrieved, scored; and inputted into SPSS for analysis.

Data Analysis

Pearson Product Moment Correlation Coefficient (PPMC) and Multiple Regression Statistical analysis of SPSS software was used for the analysis of data collected and result generated was used for the interpretation of the research questions formulated at 0.05 level of significant.

Results

Research Question One: What are the significant relationships between the independent variables (social efficacy, social assertiveness, locus of control, gender, parent's socio-economic status) on the dependent variable (social identity) of freshmen in the University of Ibadan, Nigeria?

Table 1

Descriptive statistics and Inter-correlations Matrix for the variables

Variables	N	Mean	Std. Dev.	1	2	3	4	5	6	
Social Identity	26.89	6.22	250	1						
Social Efficacy	74.48	16.28	250	.469**	1					
Social Assertiveness	69.48	18.20	250	.643**	.614**	1				
Locus of Control	31.73	10.30	250	.547**	.386**	.653**	1			
Gender	1.56	.49	250	.217**	.138*	.186**	.141*	1		
Socio-Economic Status	23.41	7.10	250	.014	.093	.010	-.035	-.108	1	
Self-Concept	60.82	15.24	250	.216**	.042	.040	.063	.143*	.030	1

Table 1 contains descriptive statistics and inter-correlations among the study variables. As shown in the table, Social Identity significantly correlated with social efficacy ($r = .469$; $p < .05$); social assertiveness ($r = .643$; $p < .05$); Locus of Control, ($r = .547$; $p < .05$); gender-type, ($r = .217$; $p < .05$); and Self-Concept ($r = .216$; $p < .01$). However, socio-economic status did not correlate with Social Identity ($r = .014$; $p > .05$). There was also inter-correlation among other variables.

Research Question 2: What is the joint effect of independent variables (social efficacy, social assertiveness, locus of control, gender, socio-economic status, and self-concept on social identity of freshmen in the University of Ibadan?

Table 2
Multiple Regression Analysis on Social Identity

	R	R (adjusted)	R ² (adjusted)	Standard error of estimate	
	.699 ^a	.488	.476	4.50532	
ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4709.700	6	784.950	38.672	.000 ^b
Residual	4932.384	243	20.298		
Total	9642.084	249			

Table 2 shows the joint contribution of Social Efficacy, Social Assertiveness, Locus of Control, Gender, Socio-Economic Status, and Self-Concept on Social Identity. The result shows that the six (6) independent variables yielded an R^2 of 0.488 and an adjusted R^2 of .476 respectively. This shows that the independent variables accounted for 47.6% ($\text{Adj. } R^2 = .476$) of the total Social Identity among new-admitted undergraduates, in Ibadan, Nigeria. The result in the table also indicated that the joint effect of independent variables: social efficacy, social assertiveness, locus of control, gender, socio-economic status, and self-concept had a significant joint influence on the Social Identity of new-admitted undergraduates, the University of Ibadan, Nigeria ($F(5, 244) = 41.589$; $p < 0.05$).

Research Question Three: What is the relative influence of social efficacy, social assertiveness, locus of control, gender, socio-economic status, and self-concept on the prediction of social identity of freshmen in the University of Ibadan, Nigeria?

Table 3: Relative Contribution of Independent Variables to the Prediction of Social Identity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.897	2.053		1.899	.059
Social efficacy	.044	.022	.116	1.982	.049
Socio assertiveness	.141	.024	.413	5.808	.000
Locus of control	.128	.037	.212	3.484	.001
Gender	.889	.594	.071	1.495	.136
SES	.008	.041	.010	.207	.836
Self –concept	.070	.019	.170	3.669	.000

Table 3 shows how each of the independent variables made a significant contribution to the prediction of Social Identity. As obtained, social assertiveness made significant contribution to the criterion, (Beta= .406; $t = 5.573$; $P < 0.05$); then, Locus of Control (Beta= .223; $t = 3.577$; $P < 0.05$); Self-Concept (Beta= .170; $t = 3.669$; $p < .05$); Social Efficacy (Beta= .119; $t = 1.986$; $P < 0.05$) and finally, Gender-Type (Beta= .096; $t = 1.981$; $P < 0.05$). Socio-Economic Status did not independently predict Social Identity (Beta= .017; $t = .366$; $P > 0.05$)

Hypothesis One: There is no significant difference in the social identity of male and female respondents

Table 4: The summary table shows significant differences in the social identity outcomes based on gender

Variable	N	Mean	SD	Std. Error	DF	t-cal	P	Remark
Male	104	26.4519	5.84572	.57322	248	.944	.346	NS
Female	146	27.2055	6.47959	.53625				

Table 4 above showed that there was no significant difference in the social identity formation of males and females ($t = .944$; $P > 0.05$). The mean value of the table further revealed that the male students do not perform better than their female counterparts in social identity formation scores. This further means that the type of gender has no significant influence on the social identity formation of respondents.

Discussion

Among various approaches to the issue of social identity, the current study sought to investigate the determinant of some psycho-sociological factors on social identity of freshmen in the University. From our analyses using three research questions, our findings have added to the growing body of scientific knowledge on social identity, especially among the newly admitted students into the University. Our findings from the first research question revealed that locus of

control, social assertiveness, self- concept, parents' social-economic status, self-efficacy, and gender all had a significant relationship with social identity among freshmen at the University of Ibadan, Oyo state, Nigeria. Everyone loves expand self-efficacy beliefs in three dimensions, generality, and strength and level. This is the basis for challenging goals (Maghlsoudi, 2005, quoted by Azizi Abargouei, 2010: 21). The difficult problems the person prepared for the points. Generality means the individual confidence for special behaviours in different situations. This means that the self-efficacy generality is the power of the individual to the most appropriate response in all circumstances (Mohammad Khani, 2002, quoted by Azizi Abargouei, 2010: 22). Self-efficacy beliefs are much stronger, more durable, and they more related to their behaviour (Hamid Pur, 1998, quoted by Azizi Abargouei, 2010: 22). Research conducted on the core concept of control is a core internal control as people competent, qualified, skilled social progressed better and have better mental and physical health have drawn (Richman, 1997: 137). Bandura (2010) states that self-efficacy is a powerful influence on behaviour (Santrak, 2011: 236). For example, a student who has low self-efficacy, perhaps even to study does not attempt a try, because it does not believe that it is useful (Biabangrd, 2007). This means that a positive self-concept will determine how effective one will function among her group members.

Research question two examines the relationship between the independent variables (self-concept, locus of control, social identity, social assertiveness, social- efficacy, social-economic status and gender, social-economic, widen the city of University freshmen? The findings showed that there was a positive and significant relationship between self-concept, self-of self-concept assertiveness and social identity. There is, however, no correlation between socio-economic status and social identity among newly admitted students to the University of Ibadan. This means that Socio-Economic Status does not determine the social identity of freshmen at Nigeria University corroborated by the previous findings that social assertiveness, locus of, control, and self-efficacy appear to be particularly associated ted with social identity (Bandura, Pastorelli, Barbaranelli & Caprara, 1999), (e.g. Ekstrom, Larry & Brenda 1986; Ross & Broh, 2000), (Rotter,1996). However, there is no relationship between parental social-economic statuses as reported (Erikson, 1968; 1980). By developing an identity structure, individuals gain a frame of reference for "making decisions, problem-solving, and interpreting experiences and self-relevant information (Berzonsky, Cieciuch, Duriez & Soenens, 2011). Developing an identity structure introduces stability over a lifetime and enables individuals to draw meaning from life experiences (Berzonsky, 2011; DeHaan & MacDermid, 1999; Meeus, 2011). Identity development in adolescence is a process of simultaneous reflection and observation; one that allows the individual to create a balance between the self and the outside world (Beyers & Cok, 2008; Eric) Self-concept social Assertiveness, and gender could increase students' social identity. Self-efficacy is a cognitive resource that involves an individual's confidence or belief in one's ability to effectively engage in behaviours toward desired goals (Majer, 2010). This research suggests that greater level of locus on control, Self-concept, and Social assertiveness are instrumental in pros moving the mindset towards members of the group one belongs to in school. Our self-esteem develops and evolves throughout our lives as we build an image of ourselves through our experiences with different people and activities.

Research question three examined the relative contribution of independent variables social efficacy, social assertiveness, Locus of control, gender, socio-economic status, and self-concept on the social identity of the University freshmen. This finding shows how each of the independent variables made a significant contribution to the prediction of social identity. The relationship

between social identity and social representation is undoubtedly dialectical: their influences upon each other are reciprocal. It should also be acknowledged that while in any one instance they may be causally linked, in others the relationship may be non-causal (both being determined by some external variable or complex network of variables). But to analyze the potential relationship between social identities and the independent variables, it is necessary to take one step back and examine how each variable is tied to one another groups. Of course, Moscovici has acknowledged in some of his writings that social representations are intimately related to group processes (Moscovici, 1981; 1984).

The tendencies to see social representations as to the property of either instar structured catenations of individuals communicating without a goal or the possession of a single highly original oriented are both misleading. There is no reason to believe that social society is just likely to be generated over a great period of contributions from many different sources who are motivated by quite different objectives. This is most true of the development of those social representations which equate with political ideologies. It is also evident where social representations are they were borrowed” by one group from another. An illustration of this comes from the work of Palmonari, Pombeni, and Zani (1987) who showed how psychologists seeking to professionalize themselves integrated into their representation of the professional psychologist images common to other professional groups. As obtained, social assertiveness made a more significant contribution to the criterion, meanwhile, socio-Economic status did not independently predict social identity.

Conclusion

The study made two unique contribution to the body of knowledge especially to the academic institution in respect to the freshmen or the newly admitted students into the citadel of knowledge. First, it shows that some psycho-sociological, like self-concept, locus of control, social-efficacy and social assertiveness has a strong significant relationship with social identity of freshmen in the University. Secondly, it is worthy of note that in this study, parent’s social economic status does not determine the social identity of freshmen in the University. To our knowledge, no previous studies have investigated social identity among freshmen in the University. Based on these unique contributions, we can affirm that freshmen like other students in the higher institution of learning could be assisted in the findings like this that could impact on their identity and overall academic performance. We therefore, recommend that individual should make efforts in carefully choosing a social group which could enhance a healthy relationship and also, freshmen should work on their personal development in other to make a positive impact in any group they choose or find themselves. Meanwhile, the institution of learning should establish good counselling institution in each faculty and equip with professional counsellor who will always be assessable to the students anytime there is a challenge in coping with others or newly found group. Personal development should be emphasized during the counselling sessions.

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Sexually Explicit Material Use And Risky Sexual Behaviour Among Undergraduates In Nigeria: Health Implications

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Abstract

Adolescents' sexual activities are on the rise and rapidly emerging as a concern for parents, teachers, school administrators and other stakeholders involved in the upbringing of children in Nigeria. The concern is as a result of the consequences that oftentimes follow adolescents' involvement in risky sexual behaviour (unprotected sex, early sexual engagement, masturbation, oral sex, multiple sex partner, anal sex etc.) such as unwanted pregnancy, sexually transmitted disease, psychological trauma, etc. This study examined if the use of sexually explicit material might be responsible for the engagement of undergraduate students in risky sexual behaviour using a descriptive survey research design. Stratified random sampling technique was used to select 383 participants from the different stratum of schools/faculties within the selected university. Data was collected using a self-structured and validated questionnaire. The Cronbach Alpha coefficient reliability score for each of the variables were 0.87 and 0.88 respectively. Regression analysis was conducted. The findings revealed that the influence of sexually explicit materials use on adolescent sexual behaviour was positive and significant at 5% level of significance ($R^2 = 0.064$, Beta = 0.253, $t = 6.975$, $p < 0.05$). Further findings revealed that vaginal intercourse (15%) most is the commonest of adolescent sexual behaviours among university undergraduates, and sexual daydreaming (4%) was the least engaged in. In addition, it was revealed that students use a variety of sexually explicit materials, however, sex scenes in movies/music videos were the most commonly used. The study concluded that the use of sexually explicit materials is a positive precursor to the outcome of adolescent sexual behaviour. The ministry of education and health should work with other stakeholders in developing and enforcing policies aimed at making sex education an integral part of the university education curriculum.

Keywords: Adolescent, Sexual behaviour, sexually explicit material

Introduction

Adolescents' sexual activities are on the rise and rapidly emerging as a public concern. Secondary sexual growth, changes in hormonal secretion, emotional, cognitive and psychosocial development result in sexual curiosity and experimentation, often in situations of little reproductive health

information. Parental and societal concerns regarding early sexual activity include unplanned pregnancy, sexually transmitted infections (STIs), sexual abuse, and potential emotional consequences of sexual behaviours (Tulloch & Kaufman, 2013).

Many adults today are uncomfortable with the idea of adolescent sexuality and prefer to remain in ignorance or denial, but there is a consensus that adolescence marks the era of enormous sexual activities. In the United States for instance, over 46 percent of all high school-age students have had sexual intercourse at least once (Barone, Voyce & Weissberg, 2016). In Nigeria, some studies have underscored high level of sexual activity among unmarried adolescents of both sexes with progressively decreasing age of debut, risky sexual practices, including unprotected sexual intercourse with multiple partners. Specific statistics puts the percentage of sexually active Nigerian adolescents at about 68 percent with most sexual debuts recorded at the average age of 15 (Bamidele & Adebimpe, 2014; Daniyam, 2013; Duru, Ubajaka, Nnebue, Ifeadike & Okoro, 2010). The health and social consequences of these early sexual engagements are mostly borne by females, in that it may lead to unwanted pregnancies, teenage births and abortions, often by quacks. Sexually transmitted diseases occur in both sexes and when inadequately treated, result in chronic reproductive tract infections, infertility and ultimately death in some cases (Aji, Aji, & Ifeadike, 2013). It is therefore critical to address adolescent sexual behaviour realistically and recognize the factors that may affect it.

Sexual behaviour, refers to a broad spectrum of behaviours in which humans display their sexuality. It includes the capacity of sexual feelings, the expression of interest, orientation, and preference. These behavioural expressions contain both biological elements and cultural influences and involves sexual awakening. Sexual behaviour ranges from the solitary (such as masturbation and autoerotic stimulation) to partnered sex (intercourse, oral sex, non-penetrative sex, etc.) that is engaged in periodically. It can also involve behaviour that is aimed at arousing desire in potential partners (courtship displays or rituals) or behaviour aimed at enhancing sexual experiences. For adolescents, sexual behaviour encompasses the subjects of intimate partnerships with significant halves, gender identity, sexual orientation, religion, and culture (Lenhart, Anderson & Smith, 2015).

Adolescence is a transitional period in the human life span, linking childhood and adulthood. It is a critical period of human development which has been a focal point for psychologists, sociologists as well as other human scientists over the years. Adolescence may generally connote an intermediate stage of physical, emotional, and cognitive maturity of an individual occurring before the onset of puberty and ending by adulthood. It can also border on issues of independence and self-identity. Many adolescents and their peers face tough choices vis-à-vis their studies, sexuality, drugs, alcohol, and social life. Peer groups, romantic interests, and appearance tend to naturally increase in importance for a period during an adolescent's journey toward adulthood (Sawyer, 2012).

Adolescence is mostly associated with the teenage years, but its physical, psychological or cultural expressions may begin earlier and end later. For example, puberty may typically begin before adolescence, particularly in females, and physical growth in males. For both genders, cognitive development can extend into the early twenties (Moghaddam, Bahreini, Abbasi, Fazli & Saeidi, 2016). Thus, age provides only a rough marker, and scholars have found it difficult to agree upon

a definitive age range for adolescence. However, the World Health Organization set the general age range to be between the ages of 10 and 19, with an extension by proxy to the age of 24.

Adolescent sexuality may have changed over the last five decades, with adolescents now reaching physical maturity earlier and marrying later. Puberty marks the obvious physical development in early to mid-adolescence and is seen as the time for potential onset of sexual thoughts and experimentation. On the average, mid-adolescence is a time when teens begin to be interested in more intimate relationships and experimentation (Tulloch & Kaufman, 2013).

Adolescents are not a homogenous group, that is, their needs vary enormously by factors such as age, gender, religion, socioeconomic condition, cultural context and so on. Similarly, their sexual behaviour may vary considerably across different groups, cultures and regions. Aji, Aji, & Ifeadike (2013) identified socioeconomic status, ethnicity, family structure, education, self-esteem, gender norms and peer pressure as factors that influence the sexual behaviour of adolescents in Nigeria. However, little or no work has been done on how exposure to Sexually Explicit Materials (SEMs) may influence sexual behaviour of adolescents; this study therefore examined the influence of sexually explicit material use on adolescents' sexual behaviours.

SEMs are materials that depict sexual activities in obvious, unconcealed or even subtle ways (Jochen & Valkenburg, 2011). They connote any pictures, photographs, drawings, sculptures, audio recordings, motion picture film or similar visual representation which depicts nudity, sexual excitement, sexual conduct, sexual intercourse or sadomasochistic abuse (Code of Virginia, 2012). They may exist in forms that include, but are not limited to books, magazines, pamphlets, videos and the internet. In a world that is increasingly becoming visual and vocal, with affordable print media and electronic screens on almost every hand, and young people constantly wanting to try out what they have been exposed to, there is probable cause to believe that their minds may be affected by the perception of their eyes and ears (Romer, 2012).

In the opinion of Morrison, Ellis & Harriman (2016) SEMs may generally appeal to the visual and auditory senses, and then stimulate the brain to conform to what has been perceived in different degrees depending on the individual in question. In other words, any age group can be affected by the use of SEMs. However, adolescents may be particularly vulnerable, this may be due to the fact that adolescents may be exposed to sexual content in the media during their developmental period when gender roles, sexual attitudes and behaviours are still being shaped also because the cognitive skills that allow the adolescents to critically analyze messages from such media and to make rational decisions based on possible future outcomes are not fully developed. Thus, it is rational to think that SEMs may trigger psychological changes that cause adolescents to desire sexual relations than normal and take risks, leading to unfavorable sexual and reproductive health manifestations including unintended pregnancies, abortions, early childbearing and sexually transmitted diseases.

There is consensus in the literature suggesting that adolescent sexuality can be influenced by their exposure to sexually explicit material (Alexy, Burgess & Prentky, 2009; Haggstrom-Nordin, Sandberg, Hanson & Tyden, 2006; Haggstrom-Nordin, Tyden, Hanson & Larsson, 2009; Hunter, Figueredo & Malamuth, 2010). These studies all agree that certain types of behaviours are depicted in the wide range of available sexually explicit materials that can be learned by adolescents through observation. However, in acknowledging that sexually explicit materials might serve as a source

of sexual knowledge to adolescents, there is an understanding that it could distort their images of sexuality. Tsitsika, Critselis, Kormas, Konstantoulaki, Constatopouolos and Kafetzis (2009) conducted a study among Greek adolescents in an effort to explore potential implications for the use of sexually explicit material. Findings suggested that adolescents who are exposed to sexually explicit material are more likely to develop “unrealistic attitudes about sex and misleading attitudes toward relationships” (p. 549).

Rationale for the Study

In the bid to come up with rational conclusions in-line with arguments concerning whether or not there is a relationship between the use of SEMs and adolescents’ sexual behaviour, a number of studies have been carried out in different locations, mostly around the developed world (Brown, 2010; Gert, Lesette, Philippe, Adam & John, 2013; Jochen & Valkenburg, 2011). They all came to similar conclusions that there is a direct association between the use of SEMs and a variety of sexual behaviours, particularly adventurous/dangerous sex and sex that involves the exchange of money being exhibited by adolescents. Thus, this study seeks examine the influence of sexually explicit materials use on adolescent sexual behaviour among undergraduates in Ogun state and the health counselling implications.

Research Questions

The study will be guided by the following research questions;

1. What are the types of sexually explicit materials used by adolescents?
2. How often do adolescents use these sexually explicit materials?
3. What are the types of sexual behaviours exhibited by adolescents?
4. Is there any significant relationship between the use of sexually explicit materials and adolescents’ sexual behaviour?

Hypotheses

The following null hypotheses are to be tested at 0.05 level of significance;

1. The use of sexually explicit materials will not significantly influence adolescents’ sexual behaviour
2. There is no significant relative effect of the use of sexually explicit materials on adolescents’ sexual behaviour.

Methodology

A descriptive survey research design was used to examine the influence of sexually explicit materials use on adolescents’ sexual behaviours. A stratified random sampling technique was used to select 344 participants from the different stratum of schools/faculties within the university with a population of 9,167. The sample consist of 160 (46.5%) males, and 184(53.5) females with the ages ranging from 15-21.

Data was collected using a self-structured questionnaire titled “Sexually Explicit Material Use and Sexual Behaviour of Adolescent University Students Questionnaire” The questionnaire was divided into the following sections:

Section A: was design to elicit the demographic details of the respondents.

Section B: This section consists of questions on the types of sexually explicit material used by the respondents. The answers will be provided in a Yes/No format.

Section C: Here, questions on the frequency of use of sexually explicit materials will be asked. The answers will be provided in line with the options of 4 Likert-type scale provided as; Very often (4), Somewhat Often (3), Rarely (2), Never (1).

Section D: This addresses the types of sexual behaviour exhibited by the respondent, as well as the frequency of the behaviours. Answers will be provided in a Yes/No format, and the options of 4 Likert-type scale provided as; Often (4), Occasional (3), Rarely (2), Not at all (1). The reliability of the instrument was determined from a test-retest that involved 30 respondents (undergraduate students) with a score Chronbach's Alpha reliability coefficients 0.87. Regression analysis was conducted.

Results

Research Questions

Research Question 1: What are the types of sexually explicit materials used by adolescents?

Table 1: Types and frequency of sexually explicit materials used.

S/N	Sexually explicit materials	Frequency	Percentage (%)
1.	Romance Novels	58	16.9
2.	Sex Scenes in Movies/Music Videos	69	20.1
3.	Pornographic Photos	64	18.6
4.	Pornographic Videos	63	18.3
5.	Erotic Audio Recordings	46	13.4
6.	Other Erotic Literature	44	12.8

Results in Table 1 showed that sex scenes in movies/music videos (20%) were the most commonly used sexually explicit materials. This was successively followed by pornographic photos (19%), pornographic videos (18%), romance novels (17%), erotic audio recordings (13%), and other erotic literature (13%).

Research Question 2: What are the types of sexual behaviours exhibited by adolescents?

Table 2: Types and frequency of Sexual Behaviours Exhibited.

S/N	Sexual Behaviours	Frequency	Percentage (%)
1.	Hand Holding	13	3.8
2.	Hugging	28	8.1
3.	Kissing/French Kissing	33	9.6
4.	Smooching	46	11.6
5.	Masturbation	40	13.4
6.	Dry Humping	24	7.0
7.	Oral Sex	23	6.7
8.	Anal Sex	29	8.4
9.	Vaginal Intercourse	52	15.1
10.	Group Sex	10	2.9
11.	Cyber Sex	17	4.9
12.	Sexual Daydreaming	13	3.8
13.	Provocative Dressing	16	4.7

Table 2: revealed that vaginal intercourse (15%) was the commonest form of sexual behaviours exhibited. This was successively followed by smooching (12%), masturbation (13%), kissing/french kissing (10%), anal sex (8%), hugging (8%), dry humping (7%), oral sex (7%), cyber-sex (5%), provocative dressing (5%), hand holding (4%), and sexual daydreaming (4%).

Hypothesis One: There is no significant influence of sexually explicit materials use on adolescent sexual behaviour.

Table 3: Influence of sexually explicit materials use on adolescent sexual behaviour.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	16.854	.930		18.120	.000
	Sexually Explicit Materials Use	.051	.012	.253	6.975	.000
a. Dependent Variable: Adolescent Sexual Behaviour						
R=0.253, R²=0.064, P=.000						

Table 3 is a linear regression analysis report showing significant influence of the independent variable on the dependent ($p < 0.05$). Therefore, the null hypothesis was not accepted. The correlation coefficient ($\beta = 0.253$) signifies that the use of sexually explicit materials had a low positive influence on the outcome of adolescent sexual behaviour. The model indicated a positive slope which was statistically significant ($t = 6.975$; $p = .000$). This suggests that an increase in the use of sexually explicit material will lead to a rise in adolescent sexual behaviour. In addition, the result showed that the use of sexually explicit materials account for 6.4% ($R^2 = 0.064$) in the variation of adolescent sexual behaviour.

Hypothesis Two: There is no significant relationship between the use of sexually explicit materials and adolescent sexual behaviour.

Table 3: Correlation between sexually explicit materials use and adolescent sexual behaviour.

	Use of Sexually Explicit Materials	Sexual Behaviour
Use of Sexually Explicit Materials	1.000	.253*
Sexual behaviour		1.000

*Correlation is significant at 0.01 level (2-tailed).

Results from Table 3 there is a significant relationship between the use of sexually explicit materials and sexual behaviour ($r = .253$, $p < .05$). This implies that the use of sexually explicit materials can influence the sexual behaviour of adolescents

Discussion

The result for research questions 1 and 2, revealed that the students were actively involved with the use of a wide range of sexually explicit materials. These included romance novels, pornographic photos and others. However, sex scenes in movies/music videos, as well as pornographic photos and videos did seem to get the attention of adolescents more. This may be due to the fact that the media space generally has in recent times been dominated by sexually explicit content that adolescents get to see without necessarily asking for it. Movies and music videos are been shown on TV on a daily basis and they seem to indulge adolescents. Also, access to pornographic videos and photos on an uncontrolled and cheap platform like the internet may be the cause of the students' high indulgence. However, the sexually explicit materials which recorded lesser frequencies of use such as erotic audio recordings and other erotic literature may have been due to the fact that they are less gratifying than the more frequently used ones. In essence, it may be easier for adolescents to watch a video than read some literature that depicts sex. The entirety of results on the use of the sexually explicit materials corroborates the finding of Kar, Choudhury, & Singh (2015) that adolescents are more predisposed to sexually explicit content that require less of their cognitive skills like reading or listening for a while before making sense of the content as sexual.

The result for research question 3 revealed that vaginal intercourse is the most common sexual behaviour exhibited by adolescents. This may be an indication of the progressively decreasing sexual debut age, especially among adolescent females as implied by Baron, Voyce & Weissberg (2016) who also stressed that adolescents seem to be going against all odds, ahead of other sexual behaviours that may be considered subtle to indulge in actual vaginal intercourse. Masturbation which also gained relatively high precedence over others in terms of adolescents' involvement may be considered a substitute behaviour to vaginal intercourse. Also, cybersex, group sex, anal sex, and oral sex are behaviours which may equally be considered substitutes to vaginal sex gained considerable grounds among the adolescents in the study locale. This is in line with the notion by Nademde (2016) that adolescents are vast in their exploration of many sexual behaviours, even as far as those that may not be considered mainstream or normal.

The results from the testing of hypothesis 1 further indicated that the use of sexually explicit materials had a significant influence on adolescent sexual behaviour. The implication of this is that at the progression with the use of sexually explicit materials, adolescents are more predisposed to, and will exhibit sexual behaviours more. Literature in line with this finding holds that the increase in the availability and use of sexually explicit materials is the reason for the increased involvement of adolescents in sexual behaviours, and that the dynamics may shift towards even more risky, and abnormal behaviours in these contemporary times (Ybarra & Mitchell, 2005; Lo & Wei, 2005; Moyano, Monge & Sierra, 2017).

The result of hypothesis 2 revealed the relationship between the use of sexually explicit materials and adolescent sexual behaviour. This has also been negated by Wiley (2013) stating that viewing sexually explicit material through media such as the internet, videos, and magazines may be directly linked with the sexual behaviour of adolescents and young adults, but only to a very small extent. His findings suggested that the use of sexually explicit materials is one of the many factors that are related to the outcome of adolescent sexual behaviour.

Health Implications of Sexually Explicit Materials

Sexually explicit materials refer to a wide range of materials that directly or indirectly depict sexual content. Many of these materials are visual or could be relayed or processed visually by the user depending on the level of cognitive development. Sexually explicit contents trigger lots of action and reaction in the users' brain, demanding some level of psychological and physical alignment to what has been seen or relayed visually and processed by the brain. Thus, the continuous availability and use of sexually explicit materials by adolescents only aids their alignment to it, pervades their thoughts and consequently results in the exhibition of various risky sexual behaviours such as masturbation, unprotected sex, multiple partner sex, oral sex, anal sex etc. as found out in this research.

The involvement of adolescents in risky sexual behaviour may eventually results to health issues for example Borreli, (2015) posit that risky sexual behaviour has inescapable psychological power capable of rewiring the adolescent's brain and cause him or her to long after the practices that have been insinuated. In the opinion of Fryar, Hirsch, Porter, Kottiri, Brody, & Louis, (2007) risky sexual behaviours can lead to serious consequences both for person and their partner(s) which sometimes may include cervical cancer, infertility and [ectopic pregnancy](#). Also leads to sexually transmitted diseases such as gonorrhea, chlamidia infection and HIV/AIDS (Potter, 2013).

Conclusion

In conclusion, this study gives a basis for concluding that the use of one or more of a variety of sexually explicit materials is an influencing factor in the engagement of adolescents in risky sexual behaviour which adversely affect their health. In essence, if the use of sexually explicit materials can be controlled, that would translate into some level of control in adolescents' sexual behaviours and the spread of diseases arising from this behaviour will be minimized.

Recommendations

Based on the findings, the following recommendations are made:

1. Conscious effort should made by all stakeholders involved in the guidance of adolescents sensitizing the undergraduate students about the influence of the use of sexually explicit materials on their sexual behaviours, emphasizing that the use of sexually explicit materials makes them more prone to high-risk sexual behaviours which have very grievous consequences on their lives.
2. The parents and guardians of the students also should play their part in discussing sex openly with their children/wards at home and not shy away from it, lest the students end up getting negative knowledge from the use of sexually explicit materials.
3. The ministry of education and other stakeholders should develop policies to ensure that sex education is made an integral part of school curriculum.
4. There should be an arrangement for undergraduate students to engage themselves in interesting activities like sports that will help them become less involved with the use of sexually explicit materials

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Psychological Predictors Of Suicide Ideation Among Nigerian Undergraduates: Implications For Counselling Interventions

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Abstract

This study investigates psychological factors (satisfaction with life, reasons for living, self-esteem, hopelessness) as predictors of suicidal ideation among undergraduates. The aim was to explore the contributions of the selected psychological factors to suicide ideation to facilitate appropriate counselling interventions to reduce the incident among Nigerian undergraduates. Two research questions were raised and answered in the study. The descriptive research design involving an online survey was used in the study. Three hundred and forty-two participants responded online to two research instruments; 'Suicide Psychological factors Scale (SPSFS)' and 'the suicide Ideation Inventory (SII)' developed by the researchers. Analysis of the responses revealed significant composite and relative contributions of psychological factors (self-esteem, hopelessness, and life-satisfaction) to predicting suicide ideation among undergraduates. Post-study counselling services were provided for willing participants. The study recommended that university counselling centres should organise massive awareness about psychological factors propelling suicide ideation and provide intensive counselling services for those with symptoms of suicide ideation.

Keywords: Suicide Ideation, Psychological factors, Nigerian undergraduates

Background to the Study

Life is precious and every human is expected to value, protect, nurture and safeguard his / her own life and that of others because once lost, it can never be replaced. Surprisingly however, there is an upsurge in the rate at which individuals mostly youths take their own lives apparently due to unfulfilled dreams and aspirations. The act of deliberately terminating one's life for whatever reason is known as suicide and it is generally a condemnable, criminal and pathological act. Suicide has unique epidemiological characteristics that make it an important public health concern. It is the fourth leading cause of death globally among youths 15 to 19 years of age and the tenth leading cause of death for adolescents 10–14 years of age (WHO, 2014). However, these figures do not include suicide attempts, which are up to 20 times and more frequent than completed suicide (WHO, 2014) which implies that suicidal ideation or thoughts would be more frequent than attempted suicide. People who experience suicidal ideation and those who make suicide plans are at increased risk of suicide attempts, and people who experience all forms of suicidal thoughts and behaviours are at greater risk of completed suicide (Ruilt, 2013).

According to a publication of Kain and Rani (2012), from the result of focus group discussions it could be inferred that young people are typically reluctant to seek professional help for mental health problems and as suicidal ideation increases, their intention to seek help decreases further,

thus the difficulty in detecting individuals with suicidal thoughts. However, any report of suicidal ideation should be taken seriously. When suicidal ideation is mild and is only discussed casually between peers, it can be found to be associated with significant symptoms of depression which is common and some other psychological outcomes which include substance use or abuse that may be easily overlooked (Asari, 2016; Stove, 2016). Furthermore, young people experiencing persistent, severe suicidal ideation are at increased risk of attempting suicide (Arria, Grady, Caldeira, Vincent, Wilcox & Wish, 2009).

Evidence from literature provides that suicidal ideation and attempts among young persons in schools, homes or communities are mediated by several psychological factors (Klonsky & May, 2014). According to the Wilburim and Smith (2005) depression which is one of the outcomes of psycho-social interactions is associated with about 50% of suicide worldwide. However, literature search for studies conducted in Nigeria are yet to elucidate predisposing issues (suicidal ideation), its' dynamics, the factors responsible or how it may have led to suicidal plans, attempts or suicide itself which is said to be under-reported. At this rate, interventions cannot be effectively carried out as any concept without a framework would lack empirical support for any intervention to be effective.

According to a publication of The Youth Coalition of the ACT (2016), from the result of focus group discussions it could be inferred that young people are typically reluctant to seek professional help for mental health problems and as suicidal ideation increases, their intention to seek help decreases further, thus the difficulty in detecting individuals with suicidal thoughts. However, any report of suicidal ideation should be taken seriously (Klonsky, May & Saffer, 2016; Baldwin & Hoffman, 2012). When suicidal ideation is mild and is only discussed casually between peers, it can be found to be associated with significant symptoms of depression which is common and some other psychological outcomes which include substance use or abuse that may be easily overlooked (Cribbi, 2000).

Some of the major symptoms indicating that the individual has strong suicide ideation and requires urgent psychological supports and counselling include being isolated, increased anxiety, talking about feeling trapped or in unbearable pain and increased substance use (Sanchez-Teruel, Garcia-Leon & Muela-Martinez, 2013; Feng, Li & Chen, 2015). Others are looking for a way to access lethal means, increased often unprovoked anger or rage, extreme mood swings, expressing hopelessness, sleeping too little or too much, talking or posting about wanting to die, making plans for suicide and in extreme situations attempted suicide (Ibrahim, Amit, Che Din & Onq, 2017).

Evidence from literature provides that suicidal ideation and attempts among young persons in schools, homes or communities are mediated by several psychological factors (Conner, Conwell, Seidlist & Caine, 2001; Fish, 2006; Goodwing, 2012). According to the American Association of Suicidology, (2014) depression which is one of the outcomes of psycho-social interactions is associated with about 50% of suicide worldwide. Some studies have also reported that all components in hopelessness (future feeling, loss of motivation, and future expectations) were significantly correlated with suicidal ideation. However, future feeling negatively correlated with suicidal ideation while loss of motivation, low self-esteem and future expectations as well as depression and anxiety positively correlated with suicidal ideation (Ibrahim, Amit, Che Din & Onq, 2017).

Moreover, it has been observed that some psychological factors were uniquely related to suicide ideation, with perceived burdensomeness, internal entrapment, depressive symptoms and history

of suicide ideation accounting for the larger incidences of suicide ideation (De Benus, Fried, Wetherall, Cleare, Connor, Ferguson, O'Carroll & O'Connor, 2019). They also identified four larger clusters of suicide ideation which are: mental wellbeing, interpersonal needs, personality, and suicide-related factors. Overall, the results suggest that relationships between suicide ideation and psychological risk factors are complex, with some factors contributing direct risk, and others having indirect impact.

However, literature search for studies conducted in Nigeria are yet to elucidate predisposing issues (suicidal ideation), its' dynamics, the factors responsible or how it may have led to suicidal plans, attempts or suicide itself which is said to be under-reported. At this rate, interventions cannot be effectively carried out as any concept without a framework would lack empirical support for any intervention to be effective. Therefore, this study intends to assess psychological factors (life satisfaction, self-esteem and hopelessness) related to suicidal ideation among students in Tai Solarin University of education.

The increasing rate of suicide among adolescents and young adults in Nigeria is of great concern to all and sundry especially social and psychological scientists who often try to understand the propelling factors with a view to providing mitigating interventions and solutions. In the time past, suicide was more or else a taboo in Nigeria and it was not a common occurrence. But, in recent times, the phenomenological increase in the rate of suicide poses a lot of questions begging for empirical explorations. Therefore, this study intends to assess psychological factors (life satisfaction, self-esteem and hopelessness) related to suicidal ideation among undergraduates at the premier University of Education in Nigeria.

Research Objectives:

The main objective of the study is to determine the psycho-social predictors of suicide ideation among undergraduates. Specifically, the study is designed to;

- i. Investigate the composite contribution of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates.
- ii. Discover the relative contribution of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates.

Research Questions

- i. What is the composite contribution of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates?
- ii. What is the relative contribution of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates?

Methodology Design

The study used the descriptive research design of survey type. This design is appropriate because it allows the researcher to reach a reasonably large portion of the target population using research instruments that require minimal physical interaction between the researchers and the respondents. Hence, with survey approach, the research instruments were distributed widely and data gathering became much more massive and reliable as there was no room for personal bias nor manipulations.

Population and Sample

The target population consisted of undergraduates in Tai Solarin University of Education, Ijagun, Nigeria. The sample included 342 undergraduates who voluntarily participated by responding to the research instruments sent to their platforms online.

Instrumentation

Two major instruments were used for data collection. These are the 'Suicide Psychological factors Scale (SPSFS)' and the 'Suicide Ideation Inventory (SII)' developed by the researchers.

i. The Suicide Psychological factors Scale (SPSFS)

The SPSFS had three sub-sections. Section A was designed to collect demographic data including while Section B contained 20 items measuring psychological factors (satisfaction with life, reasons for living, self-esteem, hopelessness) in relation to suicide ideation. Responses would be expected on a 4-scale Likert response format in which; Always = 4 points; Sometimes = 3 points; Rarely = 2 points and Never = 1 point. The maximum possible score on SPSFS was 120 while the minimum was 30. Thus, a score of 90 – 130 indicated that the individual had a 'very high level of suicide ideation'; 41 – 89 indicated 'moderate level of suicide ideation' while 30 – 40 indicated 'low level of suicide ideation'. The SPSFS subjected to item analysis, to determine its co-efficient of internal consistency yielded 0.84 on Cronbach alpha while a test re-test reliability study in which the instrument was administered twice (with three weeks interval between the two administrations) yielded 0.92 co-efficient of reliability.

ii. The Suicide Ideation Inventory (SII)

The Suicide Ideation Inventory (SII) was also developed by the researchers. The instrument measured suicide ideation in terms of the frequency of suicidal thoughts and behaviours and the factors precipitating suicide ideation among youths. The SII was also subjected to item analysis, to determine its co-efficient of internal consistency and it yielded 0.79 on Cronbach alpha while a test re-test reliability study in which the instrument was administered twice (with three weeks interval between the two administrations) yielded 0.88 co-efficient of reliability.

Procedure

The researchers obtained necessary ethical permission to conduct the study from the Directorate of Research and External Linkages, TASUED. Prospective participants were requested to voluntarily feel the 'Consent Form' sent online via the various online socio platforms used by the students of the university before participating in the study. A section in the consent form contained statements assuring participants of their responses' confidentiality; all responses were confidential and meant for research use only. After completing the consent form, participants were allowed to respond to the instruments sent online through the same platforms and indicate their interest if they would like to receive further counselling on the topic. Hence, those who requested counselling on the topic were invited and given counselling services after the study.

Results

The results of the data analysis are presented in summary tables below.

To answer the first research question, linear regression analysis was carried out and the results are displayed in the table below;

Table 1: Composite contributions of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12210.324	3	4070.108	48.785	.000 ^b
	Residual	28199.103	338	83.429		
	Total	40409.427	341			

a. Dependent Variable: suicide ideation

b. Predictors: (Constant), hopelessness, life satisfaction, self esteem

R = .550^a; R² = .302; Adjusted R² = .296; Standard Error = 0.13396

Table 1 revealed significant composite contribution of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates (F = 48.785; p < .05). This implies that psychological factors (life satisfaction, self-esteem and hopelessness) are potent predictors of suicide ideation among undergraduates. The results also yielded regression co-efficient = .550 and adjusted R² = .296 suggesting that the three factors jointly accounted for 29.6 percent of the variance in suicide ideation among undergraduates.

Further analysis to answer the second research question yielded the results presented in table 2 below;

Table 2: Relative contributions of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	69.521	3.261		21.319	.000	63.107	75.935
life satisfaction	-.221	.066	-.165	-3.324	.001	-.351	-.090
self esteem	.825	.080	.529	10.252	.000	.667	.983
Hopelessness	-.867	.086	-.523	-10.033	.000	-1.037	-.697

Table 2 revealed significant relative contribution of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates. Self-esteem was found to be the most potent of suicide ideation amongst the three psychological factors examined in this study (t = 10.252; p < .05). This was followed by hopelessness (t = -10.033; p < .05), while life-satisfaction was the least (t = -3.324; p < .05). These findings imply that efforts

must be made to raise their self-esteem, hope and life-satisfaction, to curb the rising incidence of suicide among undergraduates.

Discussion of Findings

The finding of this study revealed significant composite contribution of psychological factors (life satisfaction, self-esteem and hopelessness) to the prediction of suicide ideation among undergraduates. This suggests that the rising rate of suicide ideation among undergraduates can be explained by dissatisfaction with life, low self-esteem and hopelessness. It also revealed that the three factors jointly accounted for 29.6% of the variance in suicide ideation among undergraduates.

This finding is plausible because the socioeconomic situations in the country today are challenging. A lot of the undergraduates may be experiencing frustrating situations such as the hyper-inflation trend in the country and the uncertainty about their future life after school. All these may affect their self-esteem, hope and life-satisfaction which in turn may lead to suicide ideation. This finding corroborates De Benus, Fried, Wetherall, Cleare, Connor, Ferguson, O'Carroll & O'Connor (2019) who reported that several psychological factors correlated with suicide ideation. It also lends credence to Feng, Li & Chen, (2015) who opined that human state of mind and psychological wellbeing do contribute to suicide ideas.

The findings that self-esteem was the most potent predictor of suicide ideation amongst the three psychological factors examined in this study, followed by hopelessness and life-satisfaction can also be explained in the light of the harsh economic situations and general distasteful social situations in the country. The challenging situations may lead to demeaning self-esteem, low self-worth and carefree attitudes which in turn may lead to suicide thoughts and ideas. This finding supports Ibrahim, Amit, et al. (2017) who observed that low self-esteem correlated significantly with suicide ideation among adolescents. Similarly, the potency of hopelessness in predicting suicide ideation is also plausible because hopelessness is a manifestation of psychological wreck which often occurs when individuals fail to realize their goals and feel that the situations around them indicate that the prospects are no longer there. This finding agrees with Kelly et al. (2012) who concluded that individuals who are experiencing hopelessness always manifest suicide ideation.

Finally, the finding that life-satisfaction is also a potent predictor of suicide ideation is also understandable, especially since the regression lobe indicates inverse correlation suggesting that when life-satisfaction is high, suicide ideation is low, but when life-satisfaction is low, suicide ideation is high. Low life-satisfaction may lead to suicide ideation because the individual feels life is pleasant and may decide to terminate it. This finding corroborates De Benus et al. (2019) who reported that low life-satisfaction is one of the major predictors of suicide ideation.

Implications for Psychological Counselling

The findings of this study have a lot of implications for psychological counselling. First, self-esteem is a behavioural construct which can be improved through deliberate efforts and appropriate use of heuristic interventions such as ego-boosting, value-clarification and cognitive restructuring strategies. Therefore, university counselling centres could design appropriate counselling programs to help undergraduates who are struggling with self-esteem issues. Similarly,

hopelessness occurs in most cases where there is a perceived lack of social support and the individual feels helpless in resolving his / her concerns.

Hence, university counselling centres can help undergraduates overcome such challenges by providing necessary support and care in the form of periodic seminars, workshops, and individual counselling sessions to restore lost hopes. Finally, life-satisfaction is a matter of perception and understanding of self and the world around and how to make the best of it. Of course, university counselling centres can help students in the process of their identity formation and personality evolvment through adequate provision of useful information and services that can help them develop life-satisfaction feelings.

Conclusion and Recommendations

The findings of this study led to the conclusion that psychological factors (life satisfaction, self-esteem and hopelessness) jointly and independently predicted suicide ideation among undergraduates. Therefore, it is recommended that to curb the rising rate of suicide among undergraduates in Nigeria, university counselling centres should be strengthened through adequate staffing and provision of necessary resources so that they can adequately design and implement counselling services that can help undergraduates overcome their psycho-social challenges in order to reduce the growing rate of suicide ideation amongst them. Professional counselors should explore various heuristic interventions such as ego-boosting, value-clarification and cognitive restructuring strategies to reduce suicidal ideation among undergraduates.

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Report on Nigerian Teachers' Knowledge, Attitude, and Practice of Critical Reasoning as an Organised Discipline

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Abstract

Critical thinking is a teachable, intellectual habit urgently needed in primary and secondary schools around the world, including in Nigeria. Critical reasoning effectively safeguards against dogma, deception, indoctrination, and superstition. This study was designed to examine teachers' knowledge, attitude, and practice of critical reasoning as an organised discipline in Ibadan, Nigeria. The study adopted an ex-post facto survey design. One hundred and twenty-five teachers (27 males and 97 females) were randomly selected across six schools from four local government areas of Ibadan Municipality (Ibadan North LGA – 27; Ona Ara LGA – 35; Akinyele LGA- 34 and Ibadan North East LGA – 29). To establish the reliability of the test, Cronbach Alpha was performed. Cronbach Alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A student t-test was also employed to test the hypotheses. Results show that the Cronbach Alpha Coefficients of critical reasoning assessment inventory are teachers' attitude to critical reasoning (0.772); teachers' knowledge of critical reasoning (0.790); and teachers' practice of critical reasoning (0.785). Results further show that there is no significant difference between urban and rural areas on the teacher's attitude towards critical reasoning; on the teacher's knowledge of critical reasoning; on the teacher's practice of critical reasoning; no significant difference between male and female teachers in their attitudes towards critical reasoning, and no significant difference in the young and old in the teacher's practice of critical reasoning. Findings show that irrespective of teachers' age, gender, or school urbanization, they are favourable to the teaching of critical thinking in secondary schools. The study find unequivocal teacher support in this sample for the teaching of critical thinking in Nigerian primary and secondary schools.

Keywords: Teachers' Knowledge, Attitude, Practice, Critical reasoning

Introduction

Critical thinking skills are generally seen as very important in equipping individuals to participate in a rapidly changing democratic society and economy (e.g., Davies 2015). Critical thinking skills tend to be highly valued in education, especially in university education, where their promotion is a key objective worldwide (see, e.g., Universities UK 2015; VSNU 2015). It is important that students already have basic critical thinking skills before they enter university in order to make a successful transition because, for example, university faculties often expect incoming students to think critically (Long et al. 2018); first-year students face an abundance of (sometimes conflicting) information and theories of which they have to make sense (Utriainen et al. 2017); and students who enter university with better critical thinking skills show greater improvement in these skills during their studies (Phan 2011). Although students must enter university with critical thinking skills, research has shown that not all incoming students have acquired these skills satisfactorily (e.g., Hyytinen, Toom, and Postareff 2018; Utriainen et al. 2017). The pre-university track of secondary education plays a major role in preparing students to think critically at university, but teachers in secondary education differ in how they prepare students for university. To understand why students are prepared differently, we aim to gain more insight into how teachers think about the importance of critical thinking skills for the transition to university, and how they foster students' critical thinking skills in educational practice.

The focus on critical thinking skills has its roots in cognitive psychological and educational approaches (see for reviews, e.g., Sternberg 1986; Ten Dam and Volman 2004). From a cognitive psychological approach, critical thinking is defined by the types of behaviours and skills that a critical thinker can show. Halpern (1998), for example, defined critical thinking as 'purposeful, reasoned, and goal-directed. It is the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions' (pp. 450–451).

In an educational approach, critical thinking often equates to the highest levels of taxonomies of information processing. For example, Bloom's revised taxonomy's upper three levels (i.e., analysis, evaluation, and creation) (Krathwohl 2002) are often seen as critical thinking skills. Analysis involves breaking down ideas or arguments into their components; evaluation refers to making judgements in terms of the value of evidence; and creation involves putting elements together to form a novel, coherent whole or original product.

Against this backdrop, this study intends to establish the reliability coefficient of teachers' critical reasoning assessment battery, which consists of attitude towards critical reasoning, knowledge in critical reasoning and practice of critical reasoning. This study further examined the differences in the attitudes towards critical reasoning, knowledge in critical reasoning and practice of towards critical reasoning among secondary school teachers in Ibadan.

Research Questions

The following research questions were raised.

1. What is the reliability coefficient of the teachers' attitude towards critical reasoning scale?
2. What is the reliability coefficient of the teachers' knowledge in critical reasoning scale?
3. What is the reliability coefficient of the teachers' practice of critical reasoning scale?

Hypotheses

The following null hypotheses were formulated for the study at 0.05 level of significance, with three sets of variables on each axis: urban vs. rural, age, and gender of teacher; and their attitude towards critical reasoning, knowledge in critical reasoning, and practice of critical reasoning.

Ho1: There is no significant difference between the urban and rural area teachers' attitude towards critical reasoning.

Ho2: There is no significant difference between the urban and rural area teachers' knowledge of critical reasoning.

Ho3: There is no significant difference between the urban and rural area teachers' practice of critical reasoning.

Ho4: There is no significant difference between male and female teachers' attitude towards critical reasoning.

Ho5: There is no significant difference between male and female teachers' knowledge of critical reasoning.

Ho6: There is no significant difference between male and female teachers' practice of critical reasoning.

Ho7: There is no significant difference between young and old teachers' attitudes towards critical reasoning.

Ho8: There is no significant difference in the young and old teachers' knowledge of critical reasoning.

Ho9: There is no significant difference in the young and old teachers' practice of critical reasoning.

Methods

Design

The study adopted an ex-post facto survey design.

Following Merriam and Tisdell (2016), we used purposive sampling to select information-rich participants who are teachers interested in fostering critical thinking skills in secondary education to prepare students for university. Additionally, we used the following criteria: teachers 1) taught in secondary education; 2) obtained a NCE (Nigeria Certificate in Education) or graduate degree in their subject; and 3) had at least one year of teaching experience. All teachers we approached responded positively to the subject and were willing to participate. This resulted in a sample of 125 teachers (27 males and 97 females), who were randomly selected across six schools from four local government areas of Ibadan Municipality. Twenty-seven teachers representing 21.6% of the respondents were from Ibadan North LGA and 35 of them (28.0%) were from Ona Ara LGA while 34 (27.2%) of the total respondent from Akinyele LGA and 29 of them (23.2%) were from Ibadan North East LGA. Most respondents were from Ona Ara LGA. The teachers had between 1 and 33 years of teaching experience and taught different school subjects.

Table 1: Analysis of socio-demographic characteristics of the respondents

Table 4.1.1: Frequency distribution of respondents by gender

Gender	Frequency	Percentage
Male	27	21.6
Female	98	78.4
Total	125	100.0

Table 1 reveals that 27 representing 21.6% of the respondents were male, and 98 or 78.4% were female.

Table 2: Frequency distribution of respondents by age

Age group	Frequency	Percentage
20 to 25yrs	3	2.4
26 to 33yrs	16	12.8
34 to 40yrs	21	16.8
41 to 45yrs	14	11.2
46 to 50yrs	27	21.6
51 to 60yrs	44	35.2
Total	125	100.0%

Table 2 reveals the frequency distribution according to the age range of the respondents. The results show 3 respondents with an age range of 20 to 25 years, 2.4% of the total respondents, 16 (12.8%) age 26 to 33 years, 21 (16.8%) age 34 to 40 years, 14 (11.2%) age 41 to 45 years, 27 (21.6%) age 46 to 50 years and 44 (35.2%) age 51 to 60 years. The largest group are those aged 51 to 60.

Table 3: Frequency distribution of respondents by age

Age	Frequency	Percentage
Young (20-33 years)	40	32.0
Old (34-60 years)	85	68.0
Total	125	100.0

Table 3 reveals that 40, representing 32.0% of the respondents, were young teachers and 85 or 68.0% were old teachers. This shows that the majority of the respondents were old teachers.

Table 4: Frequency distribution of respondents by highest educational qualification

Highest educational Qualification	Frequency	Percentage
NCE	62	49.6
HND/BSc./B.A	44	35.2
B.Ed/GGDE	19	15.2
Total	125	100.0

Table 4 reveals that 62, representing 49.6% of the respondents, have NCE and 44 or 35.2% have HND/B.Sc/B.A, while 19 or 15.2% have B.Ed/PGDE. This implies that the majority of the respondents have NCE.

Table 5: Frequency distribution of respondents by years of teaching experience

Years of teaching experience	Frequency	Percentage
1 to 5yrs	13	10.4
6 to 9yrs	10	8.0
10 to 15yrs	19	15.2
16 to 20yrs	32	25.6
21 to 30yrs	34	27.2
31yrs and above	17	13.6
Total	125	100.0

Table 5 reveals that 13 teachers, representing 10.4% of the respondents, had 1 to 5 years of teaching experience, 10 (8.0%) had 6 to 9 years, 19 (15.2%) had 10 to 15 years of teaching experience. 32 (25.6%) had 16 to 20 years, 34 (27.2%) had 21 to 30 years and 17 (13.6%) have more than 31 years teaching experience. The largest group have 21 to 30 years of teaching experience.

Table 6: Frequency distribution of respondents by local government area

Local Government Area	Frequency	Percentage
Ibadan North LGA	27	21.6
Ona Ara LGA	35	28.0
Akinyele LGA	34	27.2
Ibadan North East	29	23.2
Total	125	100.0

Table 6 reveals that 27, 21.6% of the respondents, are from Ibadan North LGA, 35 (28.0%) are from Ona Ara LGA, 34 27.2% are from Akinyele LGA and 29 (23.2%) are from Ibadan North East LGA. The largest group are from Ona Ara LGA.

Table 7: Frequency distribution of respondents by location area

Location Area	Frequency	Percentage
Urban	56	44.8
Rural	69	55.2
Total	125	100.0

Table 7 reveals that 56, representing 44.8% of the respondents, are from urban areas while the majority, 69 (55.2%), are from rural areas.

Instrumentation

A self-developed critical reasoning assessment scale was used. This scale is designed to collect information from Nigerian teachers about their knowledge, attitude and practice of critical

reasoning as an organised discipline and to make subsequent recommendations to facilitate improvement. The sub-sections include: Attitude to Critical Reasoning, knowledge of Critical Reasoning and Practice of Critical Reasoning. For the Attitude to Critical Reasoning, the response format is: strongly agree – 4, agree – 3, disagree – 2, and strongly disagree – 1. For both knowledge of Critical Reasoning and Practice of Critical Reasoning, the response format is: Very True – 4, True – 3, Not True – 2, and Very Untrue – 1.

Method of data analysis

To establish the reliability of the test, Cronbach Alpha was performed. Cronbach Alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. Also, student t-test was employed to test the hypotheses.

Results Of Findings

As previously noted, nine research hypotheses were tested. The data was analysed using frequency count, percentages, and t-test analysis. The summary of data analysis is presented below:

Table 8: Showing Cronbach Alpha reliability test of teachers' attitude to critical reasoning

Reliability Statistics

Cronbach Alpha (ATTITUDE TO CRITICAL REASONING)	Cronbach Alpha Based on Standardized Items	N of Items			
.779	.772	14			
(ATTITUDE TO CRITICAL REASONING)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach Alpha if Item Deleted
I have a clear idea of what the term 'critical reasoning' means	36.42	44.551	.503	.435	.755
Teaching critical reasoning skills is integral to my job as a teacher.	36.98	45.542	.380	.408	.767
I build critical reasoning explanations and exercises into most of my lessons.	36.87	44.067	.442	.472	.761

Nigerian students, in general, are good at critical reasoning	36.64	48.826	.164	.435	.786
It is not necessary to increase the role of critical reasoning in the curriculum.	36.34	46.194	.384	.487	.766
It is not the job of the teacher to teach critical reasoning in the classroom	36.61	45.188	.411	.505	.764
Critical reasoning is especially important in teaching	36.84	44.135	.490	.527	.756
Nigerian teachers need more training about how to teach critical reasoning skills	37.00	43.458	.546	.559	.751
Critical reasoning enables one to think more deeply.	36.85	43.536	.586	.568	.748
One should not analyse sympathetically points of view that are disgusting and false.	36.91	45.186	.399	.378	.765
If a statement is unclear, we benefit by asking what our purpose is in saying it.	36.34	47.428	.311	.444	.772
Critical reasoning is essential in learning to read well.	36.67	47.375	.332	.400	.770
Critical thinkers use subjective standards to assess critical reasoning.	36.18	50.796	.098	.184	.785

Critical thinkers learn to ignore their emotions when making important decisions.	36.68	45.219	.398	.414	.765
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The tables above show that the test on teachers' attitude to critical reasoning is reliable as the Cronbach Alpha Coefficient is 0.772.

Table 9: Showing the Alpha Coefficient test on teachers' knowledge of critical reasoning

Reliability Statistics

(KNOWLEDGE OF CRITICAL REASONING) Cronbach Alpha	Cronbach Alpha Based on Standardized Items	N of Items
.790	.790	24

Item-Total Statistics

(KNOWLEDGE OF CRITICAL REASONING).	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach Alpha if Item Deleted
Examining relationships among statements.	62.96	108.041	.178	.529	.791
Interpreting the meanings from variety of data or experiences.	62.92	100.417	.478	.571	.773
Assessing the quality of ideas or data.	62.61	108.256	.217	.416	.788
Identifying alternative claims and drawing conclusion.	62.66	105.380	.382	.438	.780
Presenting results of one's reasoning.	62.99	101.500	.513	.599	.772
Generating original and new insights.	62.88	101.918	.494	.609	.773
Delivering information that committed to memory.	63.12	102.884	.467	.708	.775

Generating questions from a particular topic.	62.70	104.111	.450	.538	.777
confirming, validating, or correcting one's reasoning procedure.	62.68	101.745	.499	.620	.773
Working from specific facts to general principles.	62.95	99.540	.593	.638	.768
Storing, retaining, and recalling information.	62.71	101.226	.488	.650	.773
Separating relevant from irrelevant data.	62.37	103.743	.402	.482	.778
Moving from a question or a problem toward one correct answer or a solution.	63.02	102.729	.482	.749	.775
Predicting what will happen in the future from given information.	62.74	108.855	.159	.500	.791
Summarising an article in one's own words.	62.99	101.195	.523	.528	.772
Analysing an argument through sketching a graph or drawing a picture.	62.93	103.114	.465	.678	.775
It is important to clarify your thinking whenever you are explaining something to someone.	62.80	109.027	.158	.440	.791
It is crucial to clarify whenever someone is explaining something to you.	63.47	105.014	.308	.576	.784
It is vital to clarify whenever you are analysing an article or chapter, or topic.	63.40	110.260	.088	.497	.795
Fair-minded thinking is connected with the accurate assessment of one's reasoning.	62.36	111.368	.062	.426	.795
Depth in reasoning best relates to complexities in the issue, logical interpretations, clarifying the issue.	62.23	112.940	.004	.535	.795

One primary requirement of critical reasoning is to analyse thinking into its most basic components.	63.50	110.981	.061	.664	.797
Critical thinkers assess critical reasoning to determine what thinking to accept and what to reject.	63.04	106.125	.212	.596	.790
An important fact supporting the need for an analytic dimension of critical reasoning is that every subject presupposes critical reasoning analysis.	63.28	107.067	.209	.590	.789

From the tables above, it is evident that the test on teachers' knowledge of critical reasoning is reliable as the Cronbach Alpha Coefficient is 0.790.

Table 10: Showing Cronbach Alpha test on teachers' practice of critical reasoning

Reliability Statistics

(Practice Of Critical Reasoning) Cronbach Alpha	Cronbach Alpha Based on Standardized Items	Number of items
.785	.785	33

Item-Total Statistics

(PRACTICE OF CRITICAL REASONING)	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach Alpha if Item Deleted
When deciding on a subject. I also try to gather information about opinions that are contrary to mine.	83.42	130.918	.422	.813	.773

I question how reliable the information I have obtained is.	83.25	131.291	.381	.684	.775
I ask questions to learn more.	82.62	136.221	.293	.705	.779
No matter what the subject is, doing research is enjoyable.	83.03	130.732	.495	.821	.770
I am not patient enough to wait for the work I started to complete.	82.36	141.094	.094	.569	.787
I set myself goals (realistic) that I can reach.	83.29	136.673	.261	.743	.781
I don't leave the job I started unfinished.	83.94	134.660	.385	.797	.776
I don't speak without critical reasoning.	83.82	133.011	.433	.719	.773
I know how to access the information I need.	83.05	137.773	.201	.783	.783
Knowing the past makes it easier to understand the future.	83.03	137.068	.224	.576	.782
Diversity is wealth.	82.85	136.901	.277	.786	.780
I wonder what happened in the past.	83.39	137.654	.225	.706	.782
I do not question the accuracy of what I fully believe.	84.12	137.658	.298	.709	.780
I don't look for evidence on a subject that I believe to be true.	83.13	132.302	.465	.676	.772
I am not surprised that I know.	83.02	140.534	.084	.645	.788
Everything is as it seems.	83.29	134.915	.351	.685	.777
The accuracy of an opinion depends on the number of people participating in that opinion.	83.09	132.465	.488	.786	.772
Trying to understand opposing views is a waste of time.	82.84	139.810	.133	.655	.786

No matter what a person does, he cannot change what will happen to him.	83.57	135.281	.330	.711	.778
I seek a clear statement of the thesis or question;	82.57	139.092	.166	.650	.784
I seek reasons;	83.16	132.568	.419	.604	.774
I try to be well-informed;	83.30	136.074	.264	.637	.781
I use and mention credible sources;	83.68	136.304	.255	.599	.781
I take into account the total situation;	83.61	140.292	.081	.679	.789
I try to remain relevant to the main point;	82.74	136.365	.289	.672	.779
I keep in mind the original or basic concern;	83.12	135.210	.302	.649	.779
I look for alternatives;	82.79	140.669	.082	.662	.788
I am open-minded;	83.31	135.111	.320	.742	.778
I take a position (and change a position) when the evidence and reasons are sufficient to do so	83.31	129.215	.457	.818	.771
I seek as much precision as the subject permits;	83.48	136.424	.226	.731	.782
I deal in an orderly manner with the parts of a complex whole;	82.71	140.846	.072	.660	.789
I use one's critical reasoning abilities;	83.08	138.934	.145	.782	.786
I am sensitive to the feelings, level of Knowledge, and degree of sophistication of others	83.20	134.521	.321	.721	.778

The tables above show that the test on teachers' practice of critical reasoning is reliable as the Cronbach Alpha Coefficient is 0.785.

Table 11: The overall Cronbach Alpha Coefficient for the three tests Reliability Statistics

(ATTITUDE TO CRITICAL REASONING) Cronbach Alpha	Cronbach Alpha Based on standardized Items	Number of items
.820	.818	71

The tables above show the overall Cronbach Alpha Coefficient as 0.818 for the three tests.

Hypotheses

H₀₁: There is no significant difference between the urban and rural areas in teachers' attitude towards critical reasoning.

Table 12: T-test of difference in the urban and rural area on teachers' attitude towards critical reasoning.

Variable	Location	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers attitude towards critical reasoning	Urban	56	41.73	4.93	123	-.543	1.960	0.588 (p>0.05) Not significant
	Rural	69	42.41	8.15				
	Total	125						

Table 12 revealed no significant difference between the urban and rural areas in teachers' attitude towards critical reasoning. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = -.543 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight mean difference shows that rural area has a slightly higher mean value of 42.41 than urban area mean value of 41.73. The hypothesis is accepted. Therefore, it was concluded that there is no significant difference between urban and rural areas in teachers' attitudes toward critical reasoning.

Ho2: There is no significant difference between Urban and Rural Areas in teachers' knowledge of critical reasoning.

Table 13: T-test of difference in the urban and rural areas in teachers' knowledge of critical reasoning.

Variable	Location	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers' knowledge in critical reasoning	Urban	56	76.14	13.035	123	.985	1.960	0.326 (p>0.05) Not significant
	Rural	69	73.62	15.107				
	Total	125						

Table 13 revealed no significant difference between the urban and rural area in teachers' knowledge of critical reasoning. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = .985 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight mean difference shows that Urban Area has slight high mean value of 76.14 than Rural Area mean value of 73.62. Hypothesis is accepted. Therefore, it was concluded that, there is no significant difference in the urban and rural area in teachers' knowledge of critical reasoning.

Ho3: There is no significant difference in the urban and rural area in teachers' practice of critical reasoning.

Table 14: T-test of difference between urban and rural areas in teachers' practice of critical reasoning.

Variable	Location	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers practice of critical reasoning	Urban	56	99.02	16.701	123	-.838	1.960	0.404 (p>0.05) Not significant
	Rural	69	101.26	13.234				
	Total	125						

Table 14 revealed no significant difference between the urban and rural area in teachers practice of critical reasoning. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = -.838 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight difference shows that rural areas have a slightly higher mean value of 101.26 than the urban mean value of 99.02. Hypothesis is accepted. Therefore, it was concluded that, there is no significant difference in the urban and rural areas in teachers' practice of critical reasoning.

Ho4: There is no significant difference between male and female teachers' attitude towards critical reasoning.

Table 15: T-test of difference between male and female teachers' attitude towards critical reasoning

Variable	Gender	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers Attitude towards critical reasoning	Male	27	41.96	6.142	123	-.120	1.960	0.905 (p>0.05) Not significant
	Female	98	42.14	7.099				
	Total	125						

Table 15 revealed that there is no significant difference between male and female teachers' attitudes toward critical reasoning. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = -.120 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight difference shows that female has a slightly higher mean value of 42.14 than male mean value of 41.96. Hypothesis is accepted. Therefore, it was concluded that there is no significant difference between male and female teachers' attitudes toward critical reasoning.

Ho5: There is no significant difference between male and female teachers' knowledge of critical reasoning.

Table 16: T-test of difference between male and female on teachers' knowledge of critical reasoning.

Variable	Gender	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers' knowledge of critical reasoning	Male	27	74.11	15.602	123	.960	1.960	0.793 (p>0.05) Not significant
	Female	98	74.93	13.891				
	Total	125						

Table 16 revealed no significant difference between male and female teachers' knowledge of critical reasoning. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = .960 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight difference shows that female has a slightly higher mean value of 74.93 than male mean value of 74.11. Hypothesis is accepted. Therefore, it was concluded that there is no significant difference between male and female teachers' knowledge of critical reasoning.

Ho6: There is no significant difference between male and female teachers in practice of critical reasoning.

Table 17: T-test of difference between male and female teachers' practice of critical reasoning.

Variable	Gender	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers practice of critical reasoning	Male	27	99.30	10.003	123	.547	1.960	0.706 (p>0.05) Not significant
	Female	98	100.52	15.981				
	Total	125						

Table 17 revealed no significant difference between teachers on practice of critical reasoning for males and females. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = -.378 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight difference shows that female has a slightly higher mean value of 100.52 than male mean value of 99.30. The hypothesis is accepted. Therefore, it was concluded that there is no significant difference between male and female on teachers practice of critical reasoning.

Ho7: There is no significant difference in the young and old teachers' attitude towards critical reasoning.

Table 18: T-test of difference in the young and old teachers' attitude towards critical reasoning.

Variable	Age	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers attitude towards critical reasoning	Young	40	42.45	8.605	123	.103	1.960	0.701 (p>0.05) Not significant
	Old	85	41.94	5.951				
	Total	125						

Table 18 revealed that there is no significant difference between the young and old teachers' attitude towards critical reasoning. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = .103 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight difference shows that young teachers have a slightly higher mean value of 42.45 than old teachers mean value of 41.94. The hypothesis is accepted. Therefore, it was concluded that there is no significant difference between the young and old teachers' attitude towards critical reasoning.

Ho8: There is no significant difference in the young and old in teachers' knowledge of critical reasoning.

Table 19: T-test of difference between young and old teachers' knowledge of critical reasoning.

Variable	Age	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers' knowledge of critical reasoning	Young	40	74.78	19.494	123	.006	1.960	0.990 (p>0.05) Not significant
	Old	85	74.74	11.040				
	Total	125						

Table 19 revealed that there is no significant difference between young and old teachers' knowledge of critical reasoning. It was observed that the t-Calculated value was less than t-Critical values ($t\text{-Cal} = .006 < t\text{-Crit} = 1.960$), ($P > 0.05$). There was no significant difference. The slight difference shows that young teachers have a slightly higher mean value of 74.78 than old teachers' mean value of 74.74. The hypothesis is accepted. Therefore, it was concluded that there is no significant difference between the young and old in teachers' knowledge of critical reasoning.

Ho9: No significant difference exists in the young and old in teachers practice of critical reasoning.

Table 20: T-test of difference in the young and old on teachers' practice of critical reasoning.

Variable	Age	N	Mean	SD	df.	t-Cal	t-Crit	P
Teachers practice of critical reasoning	Young	40	102.18	9.687	123	.156	1.960	0.324 (p<0.05) Not significant
	Old	85	99.35	16.737				
	Total	125						

Table 20 revealed no significant difference between the young and old in teachers' practice of critical reasoning. It was observed that the t-calculated value was less than the t-critical values ($t\text{-cal} = .156 < t\text{-crit} = 1.960$), ($p > 0.05$). There was no significant difference. The slight difference shows that young teachers have a slightly higher mean value of 102.18 than the old teachers' mean value of 99.35. The hypothesis is accepted. Therefore, it was concluded that there is no significant difference in the young and old on teachers' practice of critical reasoning.

Discussion

Although the importance of critical thinking skills for students when they enter university is widely endorsed, previous research has shown that incoming students show great variation in levels of critical thinking skills. The pre-university track of secondary education plays a major role in preparing students to think critically at university. The present study aimed to better understand how students are prepared for critical thinking at university by their teachers in secondary

education by addressing the following research questions: 1) What reasons do teachers in secondary education give for the importance of specific critical thinking skills to students' transition to university? 2) Which practices do teachers describe as fostering students' critical thinking skills to prepare them for university?

Practices to foster critical thinking skills teachers described a broad array of practices as contributing to students' critical thinking skills to prepare them for university. Many teachers employed practices within (single lessons in) their own subject. A smaller proportion of teachers reported practices that concerned multiple courses and/or cover all upper grades of secondary education. These practices largely correspond to the strategies for promoting critical thinking found by Abrami et al. (2015) in their meta-analysis. Teachers described practices in which 1) students engaged in reading, reflecting, or solving problems on their own; 2) students learned through discussion, for example by small group discussions or question asking by the teacher; or 3) students were confronted with authentic problems that made sense to them and stimulated them to enquire.

According to Abrami et al. (2015), providing students with opportunities for dialogue and exposing students to authentic problems were most effective in fostering their critical thinking skills. These practices seem typical for the stimulation of critical thinking skills, as teachers set them against traditional teacher-focused practices used to transmit information to students. The practices that teachers described reflected how they thought about developing and cultivating critical thinking skills and transitioning to university. According to Gale and Parker (2014) previous research into the experiences of first-year students often conceptualised the transition to university as a process of 'induction' or 'development'. One teacher's practices fit the transition as induction view, which emphasises the role of student assimilation in the university culture and focuses on periods of adjustment when students have already entered the university. Transition as development focuses on the shift towards a student identity, student experiences over time, and the importance of adequate preparation. In line with this view, we found that many teachers argued for a gradual, progressive development of critical thinking skills which begins in secondary education. This suggests that secondary education teachers (as well as university teachers, see, e.g., Highton et al. 2012; Long et al. 2018) have different opinions on the responsibilities of secondary education and university in the transition to university which affected the way they prepared students for university.

Recommendations

Critical thinking should be introduced in Nigerian primary and secondary schools. For critical thinking to be a permanent feature in our society, it has to be learned. And its learning must start from the basic, elementary levels; it has to be part of the school programme. Critical reasoning should be among the subjects taught in schools from kindergarten to the tertiary levels, in vocational, technical, and grammar schools. Critical thinking is so important, and central to knowledge acquisition and understanding, to life and living that it cannot continue to be an elective course occasionally offered at the tertiary educational level. It should be part and parcel of the educational system.

Therefore, we recommend that teachers reflect on their practices to foster student critical thinking skills, and consider how they can integrate elements such as authenticity and dialogue in these practices. Many teachers found it hard and time-consuming to design practices to foster students' critical thinking skills to prepare them for the transition to university themselves. It might be helpful to provide teachers with opportunities to develop teaching practices and materials together with colleagues or university teachers (e.g., in professional learning communities) or to increase the availability of teaching materials to teachers. This can be done by, for example, increasing the exchange of materials between teachers (e.g., by making them available in an online database) or including them in educational methods. Further, a discussion between secondary and university education should be initiated about each other's responsibilities and tasks in enhancing the transition. Transition support models often emphasise the important role of both secondary and university education in the transition to university. For example, Briggs, Clark, and Hall (2012) suggested that, on the one hand, teachers in secondary school should try to prepare students for the learning modes of university and, on the other hand, that teachers at university should take into account the curriculum content and learning modes of secondary education. This emphasises that pedagogical and curricular aspects are of importance in the transition process (Pinto, Lopes, and Mouraz 2019).

As a result, more contact and collaboration between secondary and university education is needed to ensure that secondary school teachers have an up-to-date image of the knowledge and skills students need when they go to (specific degree programmes at) university. This will also develop university teachers' understanding of what they can expect from incoming students. Because incoming students are differently prepared for critical thinking in secondary education, they show a great variation in (the level of) critical thinking skills and the teaching practices they are used to. It would therefore be advisable for university teachers to tailor their instructional approaches to address these student needs. The final recommendation concerns the ambiguous nature of critical thinking skills. Secondary education teachers differed in the meanings they gave to particular critical thinking skills. This is problematic for educational practice and research because it might create a mismatch between what is fostered in secondary education and what is expected, embedded in the curriculum, and evaluated at universities and in research, for example by means of commonly used critical thinking skills tests (e.g., the CAAP). This implies that using critical thinking skills as unitary concepts might be too simplistic. Instead, it would be useful in conversations with teachers and in research to clearly indicate or discuss what is meant by 'critical thinking skills'.

Limitations for further research

Limitations of this study include its explorative nature, resulting in the emergence of issues and themes we did not anticipate. We encountered, for example, a range of complex and interrelated teacher beliefs about the transition to university, their subjects, knowledge acquisition, and the development of adolescents. While it was beyond the scope of the current article to consider these issues in any detail, it is important to acknowledge and further explore the role of beliefs in teacher perceptions and practices about university preparation. Second, the present study focused on teacher perceptions of practices to stimulate students critical thinking skills to prepare them for university. We do not know whether (or how) these perceptions and practices actually contribute to students' critical thinking skills (when they enter university). The meta-analysis by Abrami et

al. (2015) has provided some insights into the effectiveness of teaching strategies in enhancing student critical thinking skills.

For future research, we recommend investigating relationships between teacher practices and student critical thinking skills, and, in the long term, to students' transition to university (e.g., adjustment to university, (gains in) critical thinking at university, and first-year academic achievement), for example in a longitudinal study in which students are followed from the upper grades of secondary education to the first year at university.

Third, we relied on self-reported descriptions of teacher classroom practices. It might be that teachers are unaware of stimulating students' critical thinking skills, or that what teachers say they do does not match with what they actually do in their classrooms. Future research could try to obtain a more complete picture of teacher practices, for example by also including classroom observations or student perceptions.

A final limitation concerned our sample. While the sample is limited by size and scope, it allowed for gaining exploratory insights from information-rich participants. The teachers taught different school subjects, which enabled us to obtain a broad picture of the activities that were taking place in secondary school to stimulate students' critical thinking skills to prepare them for university. However, our results suggested that teachers of different subjects thought differently about the importance of specific critical thinking skills for (specific subject degrees at) university. Our study did not yield sufficient data to comment on this issue, but this would be an interesting avenue of further investigation to obtain a more differentiated picture of the way that teachers think about and foster critical thinking skills across various school subjects.

Implications

Our results suggest the following implications for practice.

The first implication concerns how secondary education teachers can foster student critical thinking skills to prepare them for university.

Authentic and real-world problems make sense to students and engage them, for example, by means of simulations, games, or role-play. Dialogue can take multiple forms, including questions asked by the teacher, whole-class discussions, and small-group discussions.

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The psychosocial Burden on Parents /Guardians of Children living with Sick cell disease at the University of Ilorin Teaching Hospital, Nigeria

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Abstract

Sickle Cell Disease (SCD) is an inherited hematological disorder characterized by episodic pain and chronic organ damage caused by abnormal sickle-shaped erythrocyte which has physical and psychosocial effects on parents of the child suffering from SCD. A phenomenological study design was used to assess the psychosocial burden of sickle cell disease child's parents attending sickle cell clinic in University of Ilorin teaching hospital. A total population of 20 parents of the SCD children was purposively sampled for this study. The sickle cell clinic days was targeted for collection of data from parents till the data saturation was reached. A researcher designed In-Depth Interview Questionnaire (IDIQs) was used as interview guides for data collection. The content and face validity and the reliability of the instrument was ascertained based on the study objectives and a pilot study conducted on 10 parents of sickle cell children attending a similar medical center in Ilorin. The ethical clearance for this study was obtained from the ethical review committee of University of Ilorin Teaching Hospital and letter of ethical approval was presented to sickle cell clinic and pediatric wards of the Hospital. Informed consent was obtained from Children's parents. The results showed that majority of caregivers had adequate knowledge about the SCD and were exposed to psychosocial and financial burden due to the nature of the child demanding condition. This study concludes that the burden of SCD does not only affect the child but also had physical, psycho-social and economic challenges on the parents of the children living with SCD. Based on this conclusion, it was therefore recommended that both government and management of health institutions and communities should subsidize the cost of SCD treatment and strengthen the family support system for families of child living with SCD.

Keywords: Parents/Guardian, Psychosocial burden, sickle cell disease patient, Sickle cell disease:

Introduction

Sickle Cell Disease (SCD) is an inherited hematological disorder characterized by episodic pain and chronic organ damage caused by abnormal sickle-shaped erythrocytes which often poses threat to the life of the individual. Children whose parents each carry the trait will have a 25% chance of inheriting the disease. An estimated 5,788,700 neonates worldwide were affected by SCD in 2010 (Piel, 2013). Patients with SCD suffer from numerous physical conditions such as hemolytic anemia, acute vaso-occlusion causing excruciating pain, embolisms in various locations throughout the body, and eventually death (Yawn, 2014). The prevalence of sickle cell trait ranges between 10 and 45% in various parts of sub-Saharan Africa (Gülendam, Güngörmüş & Olçar, 2018). In Nigeria, carrier prevalence is about 20 to 30%, and SCD affects about 2 to 3% of the Nigerian population of more than 160 million (Adewoyin, 2015). Estimates from a retrospective study in Benin City, South-South Nigeria revealed an SCD prevalence of 2.39% and a carrier rate of about 23% (Nwogoh, Adewoyin, Iheanacho & Bazuaye, 2019). Parents' experience to inform service development therefore is a core initiative in quality improvement projects within the National Health Service (NHS) (Chakravorty, Tallett & Witwicki, 2018).

Despite measures taken to alleviate suffering of the SCD child such as bone marrow transplantation which can be a curative measure; it is however, rarely used because of its perceived toxicity and the lack of suitable marrow donors (Bolanos-Meade & Brodsky; 2014). Therefore, the treatment is typically symptomatic and preventive. These treatments include long-term transfusion therapy, hydration, hydroxyurea therapy, and pain management (Yawn, 2014; Reels, Williams & Gladwin, 2010).

Psychological health challenges, such as sleep disturbances, negative body satisfaction, fatigue, anxiety, depression, and attempted suicide have been reported regarding youth with SCD (Kelly, 2015; Bhatt-Poulose, 2016). Most parents who often render care for children with SCD suffers psychological disturbance as a result of all of these illness and treatment-related issues. A systematic review, revealed that parenting stress is significantly higher among caregivers of children with chronic illnesses than it is among caregivers of healthy children (Cousino & Hazen, 2013). The few studies done on the experience and everyday strains of parents who care for children with SCD have shown that caring for a child with SCD is both stressful, demanding for parents and has negative impacts on their emotional health as well as in areas such as job performance, employability and socioeconomic status (Wonkam, 2014; Alli & Razeq, 2017). Sickle cell disease can cause physical, economical, mental problems and health implication for the sickle cell victims and the family as well as causing disruptions in their social and educational lives which occur as a result of home care responsibilities, unpredictable medical costs and uncertainties about the future of children (Gülendam, Güngörmüş & Olçar, 2018).

The social and psychological problems that the chronic illness creates in the child vary from child as an individual, the family, the type of disease, the social environment and the medical care that the child receives, and these make it easy or difficult for the child to adapt to the disease. Nigeria has the highest burden of Sickle Cell Disease (SCD) in the world and is also the top sickle cell endemic country in Africa, with an annual infant death of about 150,000 representing more than 8 per cent of infant mortality in the country (Onyeji, 2018). According to statistics by the World Health Organization (WHO), (2014), at least 100,000 babies die from sickle cell disorder in Nigeria every year making it the number one sickle-cell endemic country in Africa.

During the authors' clinical rounds in University of Ilorin Teaching Hospital at emergency pediatrics unit and pediatric medical ward, it was observed that most of the children were admitted as a result of sickle cell crisis. This condition has led to series of psychological, financial and emotional disturbance to the parents. We therefore assumed that understanding the psychosocial burden and health implication of SCD on patient's particularly children and parents/guardian is essential for effective delivery of healthcare to the victims. Based on our experiences and interaction with the victims and parents/guardians during the clinical practice and community health services, we attempted to examine the psychosocial burden of sickle cell disease on patient's parents/guardian attending University of Ilorin Teaching Hospital, Ilorin.

Research questions

1. Will sickle cell disease affect routine family activities of the victims' parents attending University of Ilorin Teaching Hospital, Ilorin?
2. Does the sickle cell disease victim parents/ relatives experiences psychological burden on attending University of Ilorin Teaching Hospital, Ilorin?
3. Will sickle cell disease victim parents/ relatives experiences social burden during the care in University of Ilorin Teaching Hospital, Ilorin?
4. What are the psychosocial burdens on victim's parents/guardians with sickle cell disease attending University of Ilorin Teaching Hospital, Ilorin?
5. What are the coping mechanisms employed by the victim's parents/guardian with SCD in University of Ilorin Teaching Hospital, Ilorin?

Methodology

This study used a phenomenological study design to assess the psychosocial burden of sickle cell disease victims' parents/guardians attending University of Ilorin teaching hospital, Ilorin. The population for this study was children's parents or guardian attending sickle cell clinic and pediatric units in University of Ilorin Teaching Hospital, Ilorin. A small sample size was used in this study such that the phenomenon in question was studied in depth. A total number of 20 parents/guardians of the SCD victims were purposively sampled for the study. The visits were made to University of Ilorin teaching hospital sickle cell clinic at 2 days interval to check for newly admitted sickle cell cases in the emergency pediatric unit and the pediatric medical ward respectively. The authors also targeted sickle cell clinic days which are on every Monday of the week to gather more information till the data saturation was reached.

Instrumentation

A researcher designed In-Depth Interview Questionnaire (IDIQs) that contained semi-structured question items was designed for the participants in the form of interview guides used for data collection.

The semi-structured question items were informed by the objectives of the study, researchers' clinical experience and reviewed literature to determine content and face validity of the instrument, while the reliability of the instrument was also ascertained by a pilot study conducted on 10 parents/guardians of sickle cell children attending a similar medical center (General Hospital) Ilorin. The proposal for this study was submitted to the ethical review committee of University of Ilorin Teaching Hospital and letter of approval was given to use sickle cell clinic and pediatric wards of the Hospital for the conduct of this study. Prior to the commencement of data collection, informed consent was obtained from each participant (Children's parents/guardians). Their

consent to participate in this study was given and they were assured of privacy on information collected which shall be used strictly for the research purpose and they were also reminded of their right to withdraw from the study at any stage of the interview.

A total number of 20 parents/guardians who visited the University of Ilorin teaching hospital sickle cell disease clinic were interviewed using a semi structured interview guide. The information elicited from the parents/guardians were based on their social demographic characteristics, the effect of disease condition on their routine family activities, strategies employed to cope with the financial challenges of the disease condition and available support system for coping with the challenges from the care rendered to the affected child. The in-depth interview (IDIs) was voice recorded to capture the exact words of the participants. Adding to the use of audiotape, field notes were taken during the sessions in order to prevent missed of relevant information and to aid accurate transcription. Only the researchers have access to items in the audio tapes. During the interview session, researcher assistants with legible handwriting wrote both questions while we document participants' responses. Each of the interview session took 11 minutes. All the IDIs sessions started with the introduction of selves to the participants and providing explanation on the study objectives. The participants were encouraged to ask questions at any stage they were not clear and adequate answers were provided accordingly.

Data analysis

The study data analysis began with transcribing the interviews scripts and notes made from each interview reviewed and highlighted. Information obtained through record review and observations were also analyzed qualitatively based on the framework that was provided and the literature. The data were analyzed manually using the "Framework Analysis "approach developed by Ritchie and Spencer (1994) which assisted in arriving at the desired findings based on the objective of the study. The interviews was transcribed, translated and then analyzed manually by assembling the transcript from each interview and utilized to form major themes and categories that emerged from the data according to this study's structure, process and outcome that answers the research questions.

Results

A total of 20 caregivers of children with SCD were assessed during the study period.

Table 1: Socio-Demographic Profile of Respondents (n= 20)

Variable	Response	Frequency	Percentage (%)
Age group	21-40	14	70.0
	>40	6	30.0
Gender	Male	6	30
	Female	14	70.0
Marital Status	Married	16	80.0
	Single	2	10
	Divorced	-	-
	Widowed	2	10.0
If married	Polygamous	12	60.0
	Monogamous	8	40.0
No. of Children	1	-	-
	2	8	30.0
	3 and above	12	60.0
Educational Qualification	primary	8	40.0
	secondary	8	40.0
	tertiary and above	4	20.0
	none	-	-
Occupation	housewife	-	-
	civil servant	2	10.0
	traders	8	40.0
	others	10	50.0
Relationship with the patient	Father	4	20.0
	Mother	10	50.0
	Brother	-	-
	Sister	2	10.0
	Others	4	20.0

Table 1 shows the socio-demographic data of the respondents based on interviews of SCD children caregivers in the university of Ilorin teaching hospital, Ilorin. The table reveals that majority (70%) of the caregivers are with mean age of 21, while equal number of caregivers were females. In this study, 80% of caregivers were married as 50% were of polygamous home. About 60% of the caregivers have more than 3 children and same percentage have attained primary or secondary educational status with 40% and 20% in each category respectively as against 20% that had tertiary institution certificates. The caregivers occupations varied from trading to 50% involved in other occupational categories with only 10% are civil servants respectively.

Thematic Results

Four distinct themes emerged from the research data. The major theme identified from the results of this study includes:

1. Clinical Burden of Sickle cell Disease.
2. Burden of Sickle cell disease on social, economic and financial status of the family.
3. Burden of Sickle cell disease on Psychosocial Health.
4. Family structure and Sickle Cell Disease.
5. Sustaining the caregivers' commitment to sickle cell disease patients.

Theme 1, 2 and 4 answers the research question 1: How sickle cell disease affected routine family activities in University of Ilorin Teaching Hospital, Ilorin

Themes 2, 3 and 4 answer the research question 2: The psychological burden of sickle cell disease on patient's relatives in University of Ilorin Teaching Hospital, Ilorin

Theme 2 and 4 answer the research question 3: The social burden of sickle cell disease on patient's relatives in University of Teaching Hospital, Ilorin

Theme 3 answers the research question 4: Factors that determined the psychosocial burden of sickle cell disease victim's parents/guardians in University of Ilorin Teaching Hospital, Ilorin

Theme 4 answered the research question 5: The coping mechanism employed by the victim's parents/guardian with SCD in University of Ilorin Teaching Hospital, Ilorin

Discussion

Socio-demographic profile of respondents

Findings from this study showed that majority of the caregivers were between the age group 21-40 years and were married indicating that they may have mutual support from their partners. The majority of caregivers who had only primary education with few had a tertiary education certificate were into trading and other form of businesses. It can be inferred from this study that most of the caregivers could not have enough money to cope with the financial burden in caring for the SCD child. This current finding does not correlate with the study by Michelle (2019), whose study showed that participants coped with their child's SCD using a combination of approaches including acceptance and emotion-focused support, level of education, sources of income as most of caregivers are schooling currently. This implied that caregivers would find it difficult to cope with the SCD children which require hospitalization regularly.

Theme 1: Clinical Burden of Sickle Cell Disease

This study revealed that duration of care given to children with SCD since diagnosis ranged from one to twelve years as it varies across the care-givers. Six of the caregivers have been given care for between 1 to 4 years since diagnosis while four of the caregivers have been given care for between 5 to 12 years since diagnosis. The mean (S.D) duration was between 4.9 ± 3.9 years. One of the caregivers said:

"my daughter had been diagnosed since about 12years ago". Another caregiver expressed that: "she has been diagnosed since when she was 3years old and I had been striving hard for about 4years to sustain the wellbeing of my daughter."

Majority of caregivers reported that their SCD children do not often get hospitalized while some of them get hospitalized most times with varying intensity of severances. One of the caregivers said:

“she gets hospitalized very well...sighs...The highest hospitalization interval for her is 2weeks and even within that 2weeks, her crisis comes up but I try all I can to subside the pain and make sure I give her drugs promptly”.

A very emotional care giver who happens to be the child’s grandfather said:

“Since the diagnosis was made, she gets hospitalized almost every month which has been a very big problem to the family” respectively.

These views implied that SCD hospitalization periods and severity of symptoms varies from child to child which had a clinical and psychological burden to both the child and the caregivers.

Research question 1 on effect of sickle cell disease on routine family activities revealed particularly the disease high demand modifies the routine family activities which were affirmed by caregivers in this study that care for SCD patients’ places enormous burden on routine family activities and causes some alterations in the normal family schedule of activities. In this present study, it was revealed that majority of the caregivers sometimes or frequently neglected other members of the family because of the high demands of the SCD child. Samuel et. al. (2012) reported in support of this present study that close relation of caregivers generates a feeling of neglect in other siblings which may be a major factor in family dysfunction. But some caregivers established that only a minimal burden was experienced on their routine family activities due to good cooperation and understanding with the family members. This corroborates with the findings by Olagunju (2017) which claimed that some caregivers experienced reduced interaction and disharmony due to the busy schedule and financial challenges on the caregivers thus, reducing their commitments to the family activities. Moskowitz et al., (2007) also supported that families of individuals with SCD deny the evidence of stigmatization.

The research question 2: The psychological burden of sickle cell disease on caregivers

This study observed that SCD can be so challenging physically and psychologically to both caregivers and patients. This current finding revealed that nature of SCD requires constant attention and commitment ranging from physical and financial efforts which poses a great stress to the psychological health of the patient’s relatives. Also in this study some of the relatives and siblings that are engaged in support get overburdened and feel uncomfortable due to the health condition of their SCD child, chores and expenses. Adegoke et al., (2012) study supported this current finding that some caregivers become psychologically threatened on whether to produce new babies or not.

This study also revealed that the financial implications caused the caregivers to be psychologically down due to excess spending and charges, which results into family crises due to aggression induced by excess monetary requirements. A previous study supported that caring for the child’s illness led to disagreements and quarrel in 22% of families (Ohaeri & Shokunbi, 2002). In a country like Nigeria and particularly in this study setting, the extended family system has to bear the major burden of chronic medical illness, due to absence of support from national social agencies. Financial commitments has been registered as a major contributor to psychological and physical stress on SCD relatives as reported in a study by Ohaeri (2002) and Habeeb, Abd Alhussain, Hassan and Ahmed (2015) respectively.

The research question 3 (Theme 2) on the social burden of sickle cell disease on patient's Relatives University of Teaching Hospital, Ilorin, observed that SCD has burden on the socio-economic

status of most caregivers as majority of them channel their major financial output into taking care of their SCD patient. One of the respondents exemplified that:

“Her child condition has affected my work badly. As a trader, whenever I get to buy goods for sale, there is always no time to make sales because virtually all my time is spent on her and I end up running losses in the business. Ordinarily, my income and that of her father is enough to manage all that she needs medically but she is not even the only sickle cell child in the family so we get drained financially”.

Some of the respondents also become socially impaired due to the condition of their child thereby reducing their financial participation in extra activities and social affairs. One of the respondents emotionally expressed that:

“My own social life as the father is not lively because I spend most of my time with him and I’m not even at peace during work because I know he might need attention at any time. I have a bakery and all the money I realize is spent on the care of my child”. Another respondent said “when it is almost Salah period, preparation might not be possible because of finances due to hospitalization of my child. We created a separate account for the child where money is being deposited every month from our income so as to cater for any arising health challenges and needs”.

A caregiver who happens to be the grandfather of the child said

“I’m even the grandfather to her, the mother which is my daughter has been sick due to all the stress from her child’s predicament and she cannot even go to work which has also limited their role in extended family functions”. As another caregivers said

“Yes, it does because I’m always unable to go to work whenever he gets admitted or whenever I bring him to the clinic. There is nobody to help to stay at the shop because my sales rep steals my money and some things if I’m not in shop to supervise them.”

This study also reported that majority of the SCD caregivers are keen in taking care of their patients causing a modification in their life style due to constant attention required from them by the SCD patients. Caregivers are moderate in attending some social responsibilities which are secondary to their busy work schedule and financial restriction. Due to the nature of the sickness, caregivers are to be closely bound to the SCD child so as to fulfill child needs and in case of emergencies. Regular financial duties and tight schedule also restrict some of the caregivers from social activities like attending regular family functions, parties and celebrations. This corroborates with a previous study that most families tend to withdraw from some social activities due to the busy and financially challenging nature of SCD (Wonkam & Mba, 2014).

The research question 4, Theme 3: Factors that determined psychosocial burden of sickle cell disease victim's parents/guardians in University of Ilorin Teaching Hospital, Ilorin

In this study psychosocial burden was observed to be very prominent factors that affect SCD children caregivers such as emotional and psychological stress. These stresses were as a result of financial commitments, close monitoring of the affected child, regular support of the children with their chores, and care for the children incessant hospitalization. This present study support a study by Kofi, Feyijimi and Olu (2015) on Psychosocial impact of sickle cell disorder: perspectives from a Nigerian setting, which showed that society's attitudes and perceptions had a psychosocial impact on people with SCD, the attitude and perception could be influenced by external factors such as advice given by health workers, family support, work responsibility and culture. It was also reported in a study by Wonkam

(2013) in support of this study that the unpredictable nature of the crisis threatens the psychosocial balance of the caregivers and relatives. Crisis care appears to be a cogent part of the care burden of caregivers of children with SCD because of difficulty in providing support for crises that may present at odd and unpredictable periods.

Majority of the caregivers experienced series of impact from SCD on their family structure and activities. These ranges from its influence on family harmony, family disharmony, family interaction and general family activities. SCD children had impact of family structure leading to increase in love and association within the family while it also reduced the affection between other members of the family. One of the caregivers said;

“The condition of my child cause no threat to my marriage oo. In fact, it has made my husband love me more and this has also strengthened the bond between her and the siblings”.

Some of the caregivers experienced reduced family interaction due to the nature of their affected child. One of the caregivers said “Yes his condition affects his interaction with other family members because he doesn’t get to converse and be friends with other people around. He does not relate with friends and cousins around. Although I don’t know maybe it is because he is being hospitalized most of the time”. Another caregiver stated that:

“It sometimes affects routine family activities, for example, when it is almost Salah period, Salah preparation might not be possible because of finances secondary to hospitalization. The financial implication also annoys my husband and he transfer the anger on me and other family members at times when he is overwhelmed”.

This condition also reduces time spent with other family members as stated by some of the caregivers. A caregiver said:

“it has greatly affected us honestly...it has affected us negatively. Because I have to spend almost all of my time with him. It affects my interaction with other children, at times because they feel he receives more attention than I give to them but it does not affect the interaction with other family members and friends”.

Some of the SCD patients are also unable to perform basic home chores due to their health status. One of the respondents said:

“It does affect the routine family activities oooo... She can’t perform any activities in the hip, even if she’s willing to. And this affects other siblings even me because we help her do most of her chores like washing her clothes”.

One of the care givers expressed that the condition of their child has increased the love between them as couples”

The research question 5; Theme 4: The coping mechanism employed by the victim's parents/guardian with SCD in University of Ilorin Teaching Hospital, Ilorin

It was gathered from this study that caregivers and patient relatives employ some coping strategies to effectively manage the health condition and other challenges that are associated with the management of the SCD child. It was inferred from this study that social and religious bodies support, helps some of the caregivers and relatives to cope with the financial aspect of the care

which reduces the burden on the patient's guardian. Patients also resort to their religious faith which serve as a source of strength to them thereby coping with the situation as they believe all afflictions comes from God. Also, support from healthcare providers also helps the relatives of the SCD children to cope especially in times of crisis and hospitalization. Some of the relatives also employ collective support system thereby contributing their individual quota towards the care for the SCD child which makes the responsibilities to be equally divided. Some relatives also chose to locate their work area within the house for easy contact of the SCD child either on or off hospitalization (Olagunju et al., 2017). Also corroborating this study was Obosi and Izedomi (2018) study on Quality of Life among Caregivers of Persons Living with Sickle Cell Anemia in Lagos state and established that hope, self-efficacy, resilience, and optimism jointly influence quality of life among caregivers of sickle cell patients respectively.

Theme 5: Sustaining the Caregivers' Commitment to Sickle Cell Disease Patients

Majority of the caregivers experienced difficulty in coping with some of the challenges that was associated with management of SCD children. In the same vein, several factors also promote the interest and commitment of caregivers towards the affected child. Support from external relations such as family, friends and religious bodies help some of the caregivers to cope with the burden of the SCD child, these ranges from physical to spiritual to moral and financial support. One of the caregivers mentioned that

"Some of my families and friends that are aware do support us with the little things and there is also a Muslim organization that is helping us regarding the money for drugs and other laboratory investigations we need to do".

Strong religious faith also help some of the caregivers to keep their emotion and stand firm as they believe God will take charge of all their afflictions. A caregiver said:

"I solely believe in God and I'm trying to cope with anything that comes out of his condition but I trust God that he will survive it". Another caregiver said *"I do cope very well and I as I Muslim , any tribulations that happen to someone , it's how God want it so I embrace this as a test from Allah".*

Support from family and health personnel is one of the important coping strategies used by the caregivers to withstand the tribulations that arise from the SCD child care. One of the caregivers Said

"Things are very hard that I'm financially drained. Even the health workers of this hospital also like the doctors and the nurses have been good to us since hospitalization". Another caregiver said *"Hmn my sister, thank God for one of my customers that is a nurse that helps us out most times oo".*

One of the caregivers expressed that family support has been a very functional way of coping with the situation. She said

"I leave my older child with my mother most times so I can take care of her ailments well and I have a sales girl at the shop".

Conclusion

This study has shown that majority of the caregivers were exposed to psychological burden due to the nature of this condition. Financial challenges, demanding care and social requirements are measurable factors responsible for the burden. Findings from this study emphasized on the need

for implementation of sustainable policies and practices that will create easy, friendly and affordable healthcare system for SCD-affected families.

Implication to nursing practice

SCD being a challenging health condition, demands regular attention from both the caregivers and other relatives. The study will be of great importance to nurses and other health workers to be able to demonstrate skills in providing a social and psychologically friendly environment to management both the SCD children and caregivers. Base on the findings of this study Professional nurses and psychologist will use the knowledge and expertise to play an important role in propagating the need to provide social support to the SCD caregivers and their patients.

Nurses and other health care workers through the findings of this study will rise up to the challenges of educating the parents/guardians about various types of stress both physical, psychosocial and health resulting from the SCD care. Health workers will implement health education protocol to empower parents/guardians on various coping strategies for efficient primary care provider.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Management of health institutions should strengthen the existing national health insurance to cover such life threatening health conditions like SCD.
2. Government at all levels should subsidize the cost of SCD care to alleviate the huge financial burden on the family.
3. The communities should strengthen the family support system for such life threatening condition like SCD.
4. Regular psychological support should be available to alleviate caregivers' and/or family members' burdens.
5. Structured genetic and counselling scheme should be established and a law mandating genotype should be made.
6. There should be flexible working and schooling plans for caregivers of SCD patients.

The researcher also suggests that further research should be conducted in various states in Nigeria on burden of SCD on psychosocial burden of SCD across various sectors. Also, more than one relative should be interviewed for each family member.

The researcher suggests that further studies should be conducted to cover a larger population and there should be more randomization of participants.

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Socio-Cultural Factors Influencing Infant and Young Child Feeding Practices among Nursing Mothers In Kajola Local Government of Oyo State

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Abstract

Nutrition can be defined as all the processes used by the adult or child to take in food and to digest, absorb, transport, utilize and excrete food substances. Food is essential for life; what children and adults eat affects their nutritional status as well as their health. This study is on the socio-cultural factors influencing infant and young child feeding practices among nursing mothers in Kajola Local Government of Oyo State. The objective of the study is to ascertain the extent of infant and young child feeding practices among nursing mothers, to determine the beliefs and attitude of nursing mothers towards infant and young child feeding practices and to determine the role of nurses in nursing mothers' practice of infant and young child feeding in Kajola Local Government of Oyo State. The survey research design was adopted. Data for this study was collected from primary and secondary sources. The findings show that that majority of the nursing mothers had good practice towards infant and young child feeding (87.9%) while very few were poor in practice towards the concept (12.1%). This study further shows that most of the nursing mother have heard about exclusive breastfeeding (87.2%) and most heard it through health care workers (79.2%). majority of the nursing mothers agreed that colostrums should be giving to infant (88.3%) and the breast milk must last for at least first six months (84.3%). majority were not aware that water should not be given at birth until six months of age (82.9%). The researcher recommends that Interventions promoting behaviour change with regards to breastfeeding should focus on dispelling the beliefs and practices that result to suboptimal breastfeeding practices and to build on the positive ones, while involving spouses and other family members as they are important sources of information on breastfeeding. In conclusion, the proportion of breastfed children declines with age; breastfeeding is nearly universal in a child's first month of life, but the proportion breastfed drops to 61percent by the time a child is 18-23months.

Keywords: Attitudes, Breastfeeding, Exclusive Breastfeeding, Factors, Infant, Nursing

Background of the Study

Globally, only a third of breastfed infants (6-23months of age) meet the criteria of dietary diversity and feeding frequency that are appropriate for their age. Infant and young child feeding practices in 33 countries located in Africa, Asia, Latin America, and the Caribbean showed high rates of noncompliance with infant and young child feeding (IYCF) recommendations International Baby Food Action Network (International Baby Food Action Network, 2013).

The proportion of breastfed children declines with age; breastfeeding is nearly universal in a child's first month of life, but the proportion breastfed drops to 61percent by the time a child is 18-23months. Under nutrition in the 6-24month age group in developing countries is a direct consequence of caregiver complementary feeding practices Kikafunda et al. (2014) in turn

resulting in significant childhood morbidity and mortality since the surviving children have increased susceptibility to and have compromised physical growth, impaired cognitive development and reduced lifetime earnings (Haas et al., 2013). Evidence shows that decline in length-for-age mainly occurs during the complementary feeding period, between 6 and 24 months of age (Dewey et al., 2014). Indeed, poor complementary feeding has been identified as a risk factor associated directly with stunting (Bhutta et al., 2013).

About 220 000 child lives could be saved every year with promotion of optimal breastfeeding and appropriate complementary feeding WHO. Interventions promoting optimal complementary feeding could prevent up to 6% of deaths in countries with high mortality rates (Lozano et al., 2015). The complementary feeding period represents a significant window of opportunity when nutrition has the greatest effect on child health, growth and development (Victora et al., 2014).

Breastfeeding is regarded by health professionals as one of the most effective ways to protect the health of both mother and child. The United Nations Children's Fund (UNICEF) appropriately refers to breast milk as "the baby's „first immunization“ that helps to protect against diarrhea, ear and chest infections, and other health problems." (United Nations Children's Fund, 2015) Various studies have documented the physical, mental, and emotional benefits that breastfeeding has on children (Araujo et al., 2016; Brunken et al., 2014). Numerous studies conducted worldwide demonstrate that there are a myriad of benefits associated with breastfeeding (Carvalhoes et al., 2015). For the child, this means a stronger immunity that lowers the risk of contracting a multitude of other diseases and chronic illnesses. Study populations with more successful rates of breastfeeding have shown lower rates of infant morbidity and mortality, decreased rates of chronic disease (i.e. cancer, diabetes, obesity, etc...), and increased cognitive development (Leon-Cava et al., 2017). Additionally, there are health and cost benefits for the mother. According to the Department of Health and Human Services Office on Women's Health, breastfeeding "...aids in minimizing postpartum maternal blood loss... delays the resumption of normal ovarian cycles... increased self-confidence... reduced risk of breast and ovarian cancers... and early return to pre-pregnancy weight." Successful breastfeeding also prevents the mother from having to invest in expensive formula for her child (Lawrence, 2015). The American Academy of Pediatrics advocates for exclusive breastfeeding during the first six months of the infant's life and recommends that mothers should breastfeed their child for a total of at least one year.

Cultural beliefs and norms have a powerful influence on human nutrition (Bandyopadhyay, 2019; David et al., 2014) and have been identified as among the determinants of breastfeeding practices (Rollins et al., 2016). Several studies have also emphasized the need to understand and incorporate cultural beliefs and practices in design and implementation of health and nutrition interventions (Bandyopadhyay, 2015; Semega-Janneh IJ, et al., 2016). The Global Strategy for Infant and Young Child Feeding further emphasizes on the need for those involved in promoting breastfeeding to understand the sociocultural and environmental circumstances around breastfeeding (WHO, 2015).

Although myths, misconceptions and cultural beliefs have been highlighted as among the hurdles to optimal breastfeeding and infant feeding in Nigeria, there is a dearth of evidence on the specific cultural beliefs and practices on breastfeeding, especially in the urban slums where poor breastfeeding practices are rampant. It is against this backdrop that this study sought to examine the socio cultural factors influencing infant and Young child feeding practices among nursing

mothers in Kajola LGA.. Moreover, no study has been conducted on this line of research in Kajola LGA. This study therefore sought to fill the gap.

Objectives of the Study

The main objective of this study is to examine the socio-cultural factors influencing infant and Young child feeding practices among nursing mothers in Kajola LGA. Specific objectives include;

- i. To ascertain the extent of infant and young child feeding practices among nursing mothers in Kajola LGA.
- ii. To determine the beliefs and attitude of nursing mothers towards infant and young child feeding practices in Kajola LGA
- iii. To determine the role of nurses in nursing mothers' practice of infant and young child feeding in Kajola LGA

Research Questions

The study sought to answer the following research questions:

- iii. What is the extent of infant and young child feeding practices among nursing mothers in Kajola LGA?
- iv. What are the beliefs and attitude of nursing mothers towards infant and young child feeding practices in Kajola LGA?
- v. What is the role of nurses in nursing mothers' practice of infant and young child feeding in Kajola LGA?

Methodology

Design

For this study, the survey research design was adopted. The choice of the design was informed by the objectives of the study as outlined in chapter one. This research design provides a quickly efficient and accurate means of assessing information about a population of interest. It intends to study socio cultural factors influencing infant and young child feeding practices among nursing mothers in Kajola local government. The study was conducted in Oyo state.

Population of the Study

The population for this study were nursing mothers in Kajola local government, Oyo state, Nigeria. A total of 134 respondents were selected from the population figure out of which the sample size was determined. The reason for choosing Oyo state is because of its proximity to the researcher.

Sample and Sampling Techniques

The researcher used Taro Yamane's formula to determine the sample size from the population. In this study, purposive non probability sampling technique was used to select the number of nursing mothers for the sample sizes needed in the study. A total of 134 nursing mothers were selected from the following town: Ilero – 47, Ilua – 43 and Okeho – 44.

Demographic data

This subsection gives detail of participant's demographic characteristics, which include age, gender, marital status of nursing mothers in Kajola local government.

Table 1: Demographical data of the participants

Variables		Frequency	Percentage (%)
Age ; Mean age $\pm$ standard deviation 27years $\pm$0.87	less than 20yrs	2	1.4
	20-24yrs	12	11.3
	25-29yrs	48	45.8
	30-34yrs	33	31.0
	35-39yrs	11	10.6
Marital status	Single	12	11.3
	Married	87	83.1
	Divorced	5	4.9
	Separate	1	.7
	Others	-	-
Religion	Christianity	36	34.5
	Islam	64	61.3
	Traditional	4	4.2
	Others	-	-
Ethnicity	Yoruba	82	78.1
	Hausa	12	11.1
	Igbo	11	10.8
	Others	-	-
Level of education	No formal education	-	-
	Primary education	10	9.7
	secondary education	60	56.8
	tertiary education	35	33.5
Occupation	Employed	16	15.0
	Self –employed	24	22.6
	House-wife	66	62.4
	Others	-	-
Number of children	None	-	-
	1-2children	59	56.3
	3-4children	45	42.9
	5 and above	1	0.8

Source: field survey, 2022

Table 1 indicates demographical data of the participants. It revealed that large proportion (45.8%) of the nursing mothers were between the age bracket of 25-29years (mean age=27years). More than average of the respondents were married (83.1%), more than half of the nursing mother were Muslim (61.3%) and secondary school graduate (56.8%). Although, most were house-wife (62.4%) with 1-2children (56.3%)

Ethical Consideration

Administration of questionnaire was not forced on the respondent but was given to the volunteers. The objectives of the research were dully explained as regard their involvement, participation and cooperation in providing reliable information. In order to stress confidentiality of the study, name or any form of identification was not required and respondents consent was sought before administration

Also permission was obtained from the Head of maternity centres in Ilero, Ilua, Okeho before administration of the questionnaires.

Research Instrument and Instrumentation

Data for this study was collected from primary and secondary sources. The primary source of data collected was mainly the use of a structured questionnaire which was designed to elicit information on socio cultural factors influencing infant and young child feeding practices among nursing mothers in Kajola local government. The secondary source of data collections were textbooks, journals and scholarly materials.

The instrument of this study was subjected to face validation. Face validation tests the appropriateness of the questionnaire items. This is because face validation is often used to indicate whether an instrument on the face of it appears to measures what it contains. Face validations therefore aims at determining the extent to which the questionnaire is relevant to the objectives of the study.

In subjecting the instrument for face validation, copies of the initial draft of the questionnaire will be validated by supervisor. The supervisor is expected to critically examine the items of the instrument with specific objectives of the study and make useful suggestions to improve the quality of the instrument. Based on his recommendations the instrument will be adjusted and re-adjusted before being administered for the study.

The coefficient of 0.81 was considered a reliability coefficient because according to Etuk (2016), a test-retest coefficient of 0.5 will be enough to justify the use of a research instrument.

Method of Data Analysis

Data analysis involves organization of data, data will be summarized, questions were analysed through the use of descriptive analysis such as percentage frequency correlational and multiple regression.

Results

Research question one: What is the level of infant and young child feeding practice among nursing mothers in Kajola local government?

Table 2: Responses towards infant and young child feeding practice in Kajola

		N=105	
Feeding practices		Yes	No
1. Have you heard about exclusive breastfeeding		92 {87.2%}	13 {12.8%}
2.If yes, Where did you hear about it?	TV/ Radio	Frequency 19	Percentage 18%
	Newspaper	3	2.8%-
	Health care workers	83	79.2%
		Yes	No
2.First milk (colostrums) should be giving to infant		93 {88.3%}	12 {11.7%}
3.Infants should be feed for the first six month with breast milk		89 {84.3%}	16 {15.7%}
4. Are you aware infants should not be given water at birth until six months of age?		18 {17.1%}	87 {82.9%}
5. Brest milk protects infants from infection		97 {92.7%}	8 {7.3%}
6. Can higher educational status influence exclusive breast feeding		82 {78.1%}	23 {21.9%}

Table 2b: Level of practices on infant and young child feeding

Level of Knowledge (on a 12-point rating scale)	Frequency	Percentage (%)
Good (6–12)	92	87.9%
poor [0.00–5]	13	12.1%
Total	105	100%
Mean ± Standard deviation; 6.34 ±1.32		

Tables 2 and 2b show the level of infant and young child feeding practice among nursing mothers in Kajola local government. This practices was rated on 12 point rating scale. The mean practice was **6.34 ±1.32**. This shows that majority of the nursing mothers had good practice towards infant and young child feeding (87.9%) while very few were poor in practice towards the concept (12.1%). This study further shows that most of the nursing mother have heard about exclusive breastfeeding (87.2%) and most heard it through health care workers (79.2%) . In addition, majority of the nursing mothers agreed that colostrums should be giving to infant (88.3%) and the breast milk must last for at least first six month (84.3%). Meanwhile, majority were not aware that water should not be given at birth until six months of age (82.9%).

Research question two: What is the attitude and beliefs of nursing mothers towards infant and young child feeding practices in Kajola local government?

Table 3. The attitude and beliefs of nursing mothers towards infant and young child feeding practices in Kajola local government.

	Items	Yes	No
1	Do you breastfeed on demand	78 {74.6%}	27 {25.4%}
2	Do you breastfeed exclusively	86 {81.7%}	19 {18.3%}
3	Do you breastfeed exclusively for six months	71 {67.2%}	34 {32.8%}
4	Are there taboo that are related to the food that you give to your child	18 {17.1%}	87 {82.9%}

Table 3 showed the attitude and beliefs of nursing mothers towards infant and young child feeding practices in Kajola local government. The result showed that majority of the nursing mothers do breastfeed their infant on demand (74.6%), breastfeed exclusively (81.7%) for six months (67.2%) but more than half of the nursing mother do not see any taboo related to the food given to their children (82.9%) in kajola local government.

Research question three: what is the roles of nurses in nursing mothers' infant and young child feeding practices in Kajola local government?

Table 4: Nurses roles on nursing mothers infant and young child feeding practices in Kajola local government.

	Items	Yes	No
1	Can exclusive breastfeeding cured infection	81 {77.3%}	24 {22.7%}
2	Is exclusive breastfeeding necessary	86 {81.9%}	19 {18.1%}
3	Breastfeeding lowers morbidity and mortality of children	82 {78.9%}	22 {21.1%}
4	Do you think a training programme on child feeding would be beneficial for nursing mothers	96 {91.4%}	9 {8.6%}
5	Have you ever been advice by a nurse on practice of exclusive breast feeding	94 {89.6%}	11 {10.4%}

Table 4 revealed nurses roles on nursing mothers of infant and young child feeding practices in Kajola local government area of Oyo State. The result showed that most of the nursing mother agreed that exclusive breastfeeding cured infection (77.3%) and it is exclusively necessary (81.9%). It also lowers morbidity and mortality of children (78.9%). In addition, almost all the respondents concurred that training programme should be organize to facilitate nursing mothers on child feeding (91.4%) and many attested to the advice given to them by the nurses towards the practice of exclusive breastfeeding. (89.6%) in Kajola local government

According to Peterson 2022, Breastfeeding provides unmatched health benefits for babies and mothers. It is the clinical gold standard for infant feeding and nutrition, with breast milk uniquely involved to meet the health needs of a growing baby. We must do more to create supportive and safe environment for mothers who choose to breastfeed.

The study is on the socio-cultural factors influencing infant and young child feeding practices among nursing mothers in Kajola Local Government. A hypothesis was formed to test that Nurses do not have any significant role in nursing mothers' practice of infant and young child feeding in Kajola LGA. Findings from the study revealed that majority of the respondents were of the opinion that nurses do have any significant role in nursing mothers' practice of infant and young child feeding in Kajola LGA.

From Table 1, indicates demographical data of the participants. It revealed that large proportion (45.8%) of the nursing mothers were between the age bracket of 25-29years (mean age=27years). More than average of the respondents were married (83.1%), more than half of the nursing mother were Muslim (61.3%) and secondary school graduate (56.8%). Although, most were house-wife (62.4%) with 1-2children (56.3%). *World Health Organization (2013), also conducted a collaborative study to determine the socio-cultural factors that influence exclusive breastfeeding practice in nine developing countries including India. The findings showed that socio cultural factors such as employment, education, income, and urban residence were the strongest determinants of the length of breastfeeding.*

Table 2a and 2b shows the level of infant and young child feeding practice among nursing mothers in Kajola local government. This practices were rated on 12-point rating scale. The mean practice was 6.34 ± 1.32 . This shows that majority of the nursing mothers had good practice towards infant and young child feeding (87.9%) while very few were poor in practice towards the concept (12.1%). This study further shows that most of the nursing mother have heard about exclusive breastfeeding (87.2%) and most heard it through health care workers (79.2%). In addition, majority of the nursing mothers agreed that colostrums should be giving to infant (88.3%) and the breast milk must last for at least first six months (84.3%). Meanwhile, majority were not aware that water should not be given at birth until six months of age (82.9%). *This is not in line with a study conducted by Nwachukwu and Nwachukwu (2015), that investigated the most common factors responsible for less than six months EBF among women in Delta State University community Abraka. The instrument for the study was a questionnaire with close ended questions. The results of the study revealed that majority of the respondents agreed that six of the factors such as unwillingness to let the breast sag, loss of attractive figure, ill-health of nursing mothers, job nature, and inconvenience as caused by babies were decisive in preventing EBF. However, they disagreed with some of the factors, which were the belief that small sized breast can't produce milk and the lower abdominal pains experienced by some mothers during breast-feeding.*

Table 3 showed the attitude and beliefs of nursing mothers towards infant and young child feeding practices in Kajola local government. The result showed that majority of the nursing mothers do breastfeed their infant on demand (74.6%), breastfeed exclusively (81.7%) for six months (67.2%) but more than half of the nursing mother do not see any taboo related to the food given to their children (82.9%) in Kajola local government. This is not in line with a study conducted *Lande, Anderson, Bearing, Trygg and Lund-larson (2013) studied the infant-feeding practices and associated factors in the first months of life in Norway. Self-administered food frequency questionnaires were filled by 2,383 mothers when their infants were aged between 6 and 36 weeks. The findings showed that only 1% of the infants had never been breastfed. The proportion of breastfed infants was 96% at one month, 85% at 4 and 8% at 6 months. For EBF at 4 months or six months, and timely introduction of solid foods, significant positive trends were found for maternal age education and urbanization.*

Table 4 revealed nurse's roles on nursing mothers of infant and young child feeding practices in Kajola local government. The result showed that most of the nursing mother agreed that exclusive breastfeeding cured infection (77.3%) and it is exclusively necessary (81.9%). It also lowers mobility and mortality of children (78.9%). In addition, almost all the respondents concurred that training programme should be organize to facilitate nursing mothers on child feeding (91.4%) and

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According to Peterson 2022, Breastfeeding provides unmatched health benefits for babies and mothers. It is the clinical gold standard for infant feeding and nutrition, with breast milk uniquely involved to meet the health needs of a growing baby. We must do more to create supportive and safe environment for mothers who choose to breastfeed. 2022, center for Disease control and prevention, division of nutrition, physical activity and obesity U.S.A.

Implication to Nursing

Nursing practice

This study showed that majority of the nursing mothers had good practice towards infant and young child feeding; the implication of this study is that the nurse should continue to update their knowledge and to know about infant and young child feeding practices the current trends about in order to help the nursing mothers.

Adequate health information/counselling should be given to all nursing mothers during the antenatal clinic including reproductive health services available which can help promote maternal health

Nurses should develop a good inter-personal relationship skill which helps to resolve misconception about infant and young child feeding practices.

There is also need for the nurses to know the importance and benefit of infant and young child feeding practices.

Nursing Administration

Administrators can support the development of evidence based practice by allowing nurses time to learn more on infant and young child feeding practices

Nurse's administrators should concentrate on workshop and in service education of nurses, who play a vital role on teaching about infant and young child feeding practices.

There should be provision of reading material like journal, manuals, textbooks etc. in the department for updating the knowledge of nursing personnel.

Nursing Education

The result obtained will help nursing education to make room to adopt measure required to correct the identified barriers influencing the role of nursing mothers on the infant and young child feeding practices.

The curriculum of education in nursing as made it compulsory for nurses to become aware of the infant and young child feeding practices.

Nursing Research

The details provide the platform for further research, therefore increasing the body of knowledge of the profession and researchers thereby developing measures to eliminate the identified barriers influencing the role of nursing mothers on the infant and young child feeding practices. Also questionnaire was distributed to the nursing mothers in order to know their knowledge about the infant and young child feeding practices.

Conclusion

In conclusion, the proportion of breastfed children declines with age; breastfeeding is nearly universal in a child's first month of life, but the proportion breastfed drops to 61percent by the time a child is 18-23months. Under nutrition in the 6-24month age group in developing countries is a direct consequence of caregiver complementary feeding practices in turn resulting in significant childhood morbidity and mortality since the surviving children have increased susceptibility to and have compromised physical growth, impaired cognitive development and reduced lifetime earnings (Haas et al., 1996). Evidence shows that decline in length-for-age mainly occurs during the complementary feeding period, between 6 and 24months of age. Indeed, poor complementary feeding has been identified as a risk factor associated directly with stunting

Recommendations

Interventions promoting behaviour change with regards to breastfeeding should focus on dispelling the beliefs and practices that result to suboptimal breastfeeding practices and to build on the positive ones, while involving spouses and other family members as they are important sources of information on breastfeeding.

Therefore, for an improvement in the exclusive breastfeeding rate of this population, health workers should bear in mind the socio-cultural factors of mothers in this locality during antenatal and postnatal cares.

Recommendations were made based on the findings. This study can possibly be used as a foundational study to conduct further research.

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